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**NORTHERN ROCKIES ECOSYSTEM
PROTECTION ACT OF 1993**

JOINT HEARING
BEFORE THE P52-68
SUBCOMMITTEE ON SPECIALTY CROPS
AND NATURAL RESOURCES
OF THE
COMMITTEE ON AGRICULTURE
AND THE
SUBCOMMITTEE ON
ENVIRONMENT AND NATURAL RESOURCES
OF THE
COMMITTEE ON
MERCHANT MARINE AND FISHERIES
HOUSE OF REPRESENTATIVES
ONE HUNDRED THIRD CONGRESS
SECOND SESSION
ON
H.R. 2638

MAY 4, 1994

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NORTHERN ROCKIES ECOSYSTEM PROTECTION ACT OF 1993

WEDNESDAY, MAY 4, 1994

HOUSE OF REPRESENTATIVES; SUBCOMMITTEE ON SPECIALTY CROPS AND NATURAL RESOURCES; COMMITTEE ON AGRICULTURE; JOINT WITH SUBCOMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES; COMMITTEE ON MERCHANT MARINE AND FISHERIES,

Washington, DC.

The subcommittees met, pursuant to call, at 10:10 a.m., in room 1300, Longworth House Office Building, Hon. Charlie Rose (chairman of the Subcommittee on Specialty Crops and Natural Resources) presiding, together with Hon. Gerry E. Studds (chairman of the Subcommittee on Environment and Natural Resources).

Present from the Subcommittee on Specialty Crops and Natural Resources: Representatives Rose, Pomeroy, Peterson, Farr, Volkmeyer, and Goodlatte.

Present from the Subcommittee on Environment and Natural Resources: Representatives Studds, Hochbrueckner, Furse, Eshoo, Tauzin, and Ravenel.

Also present: Representative E (Kika) de la Garza, chairman of the Committee on Agriculture; Representative Robert F. (Bob) Smith, member of the Committee on Agriculture; and Representative Maloney.

Staff present from the Committee on Agriculture: Glenda L. Temple, clerk; Joan Teague Rose, Alexandra Buell, James A. Davis, and Stacy Carey.

Staff present from the Subcommittee on Environment and Natural Resources: Daniel M. Ashe, staff director; Marvadell Zeeb, clerk; Lesli Gray, professional staff; minority—Thomas O. Melius, professional staff; and Sharon McKenna, professional staff.

OPENING STATEMENT OF HON. CHARLIE ROSE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. ROSE. The Specialty Crops and Natural Resources Subcommittee of the Committee on Agriculture and the Environment and Natural Resources Subcommittee of the Committee on Merchant Marine and Fisheries joint public hearing on H.R. 2638, the Northern Rockies Ecosystem Protection Act, is now open.

[H.R. 2638 is held in the committee files.]

Mr. ROSE. I want to thank everyone for attending today's hearing. Some of the Nation's most pristine lands are found in the

Northern Rocky Mountains. The region is home for the grizzly bear and a host of other game animals and fowl.

H.R. 2638 would create 16.5 million acres of wilderness on public lands in Washington, Oregon, Idaho, Montana, and Wyoming. This bill has raised some very interesting proposals that I believe deserve our attention such as biological connecting corridors which will allow wildlife to travel between various ecosystems and disposition of remaining roadless areas held in the public trust.

The subcommittees are pleased to have the bill's sponsor with us, Congresswoman Carolyn Maloney. I look forward to your testimony and the testimony of all of today's witnesses. It is my hope that this hearing will further the ongoing debate on ecosystem protection and add to this very important shift in the management of our national forests.

I am pleased now to ask my colleague from Massachusetts, the chairman of the Merchant Marine and Fisheries Committee, the Honorable Gerry Studds, who came to Congress the same time I did, several years ago, if he has an opening statement.

OPENING STATEMENT OF HON. GERRY E. STUDDS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MASSACHUSETTS

Mr. STUDDS. You had to remind me of that, didn't you?

Thank you, Mr. Chairman, and venerable colleague. I echo your remarks. I commend the gentlewoman from New York's highly imaginative, innovative, downright daring proposition. It is clear that these areas are extraordinarily valuable. In many respects, they are unique. They are home to many endangered and threatened critters.

It is also clear that the odds are strong, as the gentleman noted, with regard to this legislation. It is an interesting thing about the critters out there, that they seem to have less respect than we for lines that we draw on the maps.

We in this town cannot function without lines on maps, and actually most of the rest of the country is the same way, but it is amazing that the wildlife of the land has precious little respect for those lines. Whether or not we can reconcile our differing approaches on that to those lines, I don't know, but I do know that this legislation has precipitated what I think is a very healthy debate on a topic that is enormously important. I commend the gentlewoman and those who have fought so hard for it.

I apologize. As I think you know, I have 11½ simultaneous conflicts and will not be able to stay, but I wanted to express my appreciation and respect to those of you who are putting forth this proposition. It is one that deserves to be heard and I am sure the record we develop today will be a very valuable contribution.

[The prepared statement of Mr. Studds follows:]

Statement of the Honorable Gerry E. Studds, Chairman
Subcommittee on Environment and Natural Resources
Joint Hearing on the
Northern Rockies Ecosystem Protection Act
H.R. 2638

May 4, 1994

The Subcommittees meet this morning to focus on the Northern Rockies Ecosystem Protection Act, introduced by Congresswoman Maloney.

The Northern Rockies Ecosystem is home to the largest intact mammal and predatory bird fauna in the contiguous 48 states, including several threatened and endangered species. This bill represents an innovative and, in many respects, a revolutionary approach to protecting over 20 million acres of the nation's remaining wildlife habitat. Ms. Maloney and the coalition of interests that her bill represents, have taken the concept of "ecosystem management" and are attempting to put it to practice on a level which is exceeded by only one other effort that I know of - and I am certain that, to compensate, they will not be resting on the 7th day.

I commend Congresswoman Maloney for introducing legislation which concentrates on preserving an ecosystem encompassed by several states. I agree wholeheartedly, that to protect our forests, our watersheds and the wildlife that depends upon them, we must look beyond the borders man has drawn. However, this is a tall order for a town, and indeed a nation, that is accustomed to doing things based on our habit of drawing lines on a map.

I welcome today's witnesses. I trust that their testimony will provide us with information that enables us to have a constructive debate on this bill and the protection of the Northern Rockies Ecosystem.

Mr. ROSE. Thank you Mr. Chairman. I recognize the gentleman from South Carolina, Mr. Ravenel, for any opening comments he would like to make.

Mr. RAVENEL. No, sir.

Mr. ROSE. The gentlelady from California, Ms. Eshoo, for any opening comments you would like to make.

OPENING STATEMENT OF HON. ANNA G. ESHOO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Ms. ESHOO. Thank you, Mr. Chairman. And I couldn't mean that more to Chairman Rose and to the chairman of the committee that I am a member of, Merchant Marine and Fisheries, for holding this joint hearing today. I want to welcome all of the distinguished panelists including, of course, my colleague Carolyn Maloney and Carol King who have both worked very hard on this critical issue.

I am proud to be an original cosponsor of the Northern Rockies Ecosystem Protection Act. The areas included in this bill are some of the largest remaining tracts of native forest and biodiversity in the Northern Rockies. Their ecosystems are home to grizzly bears, gray wolves, woodland caribou, salmon and trout, bald eagles, and many more species.

Unfortunately, these unique and pristine areas are in great danger because of poor land management practices and unabated development which threaten to strip the land of its trees, waters, and animals.

The Northern Rockies Ecosystem Protection Act, I believe, will protect these beautiful areas for our children and theirs. The bill provides for an ecosystem-based approach which we now know is the best way to preserve wildlife populations and avert train wrecks like those that have occurred in the Pacific Northwest. The bill is supported by over 320 organizations and businesses nationwide and is backed by world-renowned biologists and sportsmen's groups.

I again thank both of the chairmen for holding this hearing today. I think this will develop a valuable record for our colleagues to review and I look forward to hearing the testimony from our distinguished guests as long as I can stay here.

Thank you, again, Mr. Chairman.

Mr. ROSE. The gentlelady is recognized.

OPENING STATEMENT OF HON. ELIZABETH FURSE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Ms. FURSE. Thank you, Mr. Chairman. It is a great pleasure for me to be here today with my colleagues from both the Merchant Marine and the Agriculture Committees to hear testimony on this very important issue. I, along with other members of the Merchant Marine Committee, requested that Chairman Studds hold this hearing so we can become better educated about the unique approach of this legislation. Historically, wilderness designation has occurred on a State-by-State basis.

H.R. 2638, however, embraces the concept of ecosystem management by proposing an ambitious 20 million acre protection package covering lands in five different States.

We hear a lot of talk about ecosystem management these days, but much less about what it really means to implement it on the ground. With the help of this expert panel of scientists and economists, today's hearing will hopefully help enlighten us about some of the scientific, economic and social implications of this new management concept.

Thank you, Mr. Chairman.

Mr. ROSE. I thank the gentlelady. We are very happy at this time to welcome the original cosponsor of this bill, Congresswoman Carolyn B. Maloney, 14th District of New York, to our hearing and we would be happy to hear from you.

STATEMENT OF HON. CAROLYN B. MALONEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mrs. MALONEY. Thank you very much, Mr. Chairman.

I would like to first of all thank you very much for holding this hearing, and likewise Chairman Studds. Since I first introduced this bill, it has attracted 58 cosponsors from over 20 States. It has been endorsed by the Sierra Club because it makes good sense, environmentally, and the National Taxpayers Union has noted the good sense it makes economically.

It has deep and strong support in the areas affected by the legislation. Hundreds of organizations representing businesses and small property owners have expressed their support. To this date, this bill is specifically supported by individuals and organizations representing over 5 million people in America so far and counting.

Yesterday I received a letter which eloquently sums up the reasons for all this support. The writer, former President Jimmy Carter, has asked me to include his statement in my testimony.

With your permission, may I make his letter a part of the permanent record?

Mr. ROSE. Without objection.

[The letter follows:]



JIMMY CARTER

May 4, 1994

To the Chairmen and members of the distinguished committees who are considering H.R. 2638, the Northern Rockies Ecosystem Protection Act, I thank you for the opportunity to submit my comments for the official hearing record on this important legislation.

I strongly support the Northern Rockies Ecosystem Protection Act. This bill not only represents the future of public land management in America; it also is an economically sound proposal.

I have on many occasions hiked through the forests and floated and fished the great rivers and streams of the Northern Rockies, where many of the Nation's most wild and scenic wonders are found. The Congress, recognizing that we hold these national treasures in trust for the American people and posterity, took a big step in American conservation history when it established Yellowstone and Glacier National Parks in the Northern Rockies. Later Congress added protection by establishing the Bob Marshall, the Selway-Bitterroot, and Frank Church-River of No Return Wilderness Areas. I believe it is now time for Congress to complete the job of protecting the Northern Rockies, the last landscapes in the contiguous states to remain as pristine as when Lewis & Clark passed through them nearly 200 years ago.

The legislation before the committee will protect the habitat of many of America's most majestic wildlife species, including the grizzly bear, elk, wolf, woodland caribou, as well as the spawning grounds for the salmon and steelhead who make the 900 mile journey from the Pacific Ocean to the high, rugged headwaters of the Northern Rocky Mountains. Many of America's blue-ribbon trout streams will be protected as Wild and Scenic Rivers by NREPA. It will also accomplish a long overdue service by protecting our greatest National Parks that are being degraded by external threats.

NREPA heralds a new era in public lands management, based upon securing the integrity of the ecosystem in a biologically and economically sustainable way. NREPA is also cost-effective legislation. It will eliminate the practice of below-cost timber sales in the National Forest of the Northern Rockies that have burdened taxpayers, to the tune of hundreds of millions of dollars.

Perhaps the most important factor to consider is that NREPA has the strong support of the American people, who own these public lands. At a time when only 5% of America's original pristine forests still remain, it is our duty and obligation to protect and restore these national treasures as we have enjoyed them and been sustained by them physically, mentally, and spiritually.

I applaud the respected Chairmen and members of the committees for considering this vital and timely legislation, and strongly support its swift enactment by the Congress.

Sincerely,

A handwritten signature in black ink, appearing to read "Jimmie Parker". The signature is fluid and cursive, with "Jimmie" on the top line and "Parker" on the bottom line.

Mrs. MALONEY. And add just one paragraph, and I quote from him directly: "Perhaps the most important factor to consider is that NREPA has the strong support of the American people who own these public lands. At a time when only 5 percent of America's original pristine forest still remain, it is our duty and obligation to protect and restore these national treasures as we have enjoyed them and been sustained by them physically, mentally, and spiritually."

Mr. Chairman, when I was younger, I was thrilled and inspired to visit some of the great forests of the Northern Rockies. Tragically, I can't show these forests to my children today because they no longer can be seen.

The rapid depletion of forests disturbs me. I recognize that America needs lumber and there are many jobs that depend upon industries like timber and mining, but it is woefully simplistic to think of wilderness protection as jobs versus trees.

We all recognize and agree that as far as logging on Federal lands goes, it only provides jobs because the Government and the taxpayers provide millions and millions of dollars of subsidy to the timber industry. In the forest covered in this legislation, according to the Congressional Budget Office, Federal expenditures exceed receipts by a 3 to 1 ratio even when Federal roadbuilding is excluded. These forests are money losers. Ultimately it is by the sufferance of all American taxpayers that logging can continue in these particular Federal forests.

The question that the subsidy really raises is this: Should all American taxpayers be subsidizing the destruction of publicly owned forests? At what point do we say that the remaining untouched wilderness is too valuable to allow Japan to turn into plywood?

Many scientists argue that further logging of these roadless lands at present rates will result in irreparable damage to our remaining populations of mammals, fish, and birds, to our pristine rivers and streams, to our unique old-growth forest.

Mr. Chairman, I tend to agree with that overwhelming independent scientific opinion. I believe that our management policy should be guided by the need for preservation rather than by the small possibility that all of these scientists may be wrong.

It was for these underlying reasons that I introduced H.R. 2638. Let me briefly discuss some of the things that NREPA would and wouldn't do if enacted.

First and foremost, the bill does not change the status of a single acre of private or State-owned land. It only deals with Federal land which is held in trust by the Government for the benefit of all Americans.

NREPA would not designate lands that are currently open to timber and mining. Now, since the legislation was introduced last July, some of the exact boundaries of the roadless areas may have changed slightly.

It is important to note that this bill deals with only a small percentage of the total number of western forests. We are truly speaking about a negligible percentage of U.S. timber industry. Although we are discussing only a small percentage of U.S. timber production, I do not mean to diminish the scope of the legislation.

NREPA will designate over 16 million acres of new wilderness, but most of the land is not suitable for timber harvest or mining. In fact, according to Dr. Thomas Power, the chairman of the department of economics at the University of Montana, only 20 percent of the land designated in NREPA is suitable for timber harvest.

Mr. ROSE. Could I interrupt you a minute; 20 percent? Dr. Power, the chairman of the department of economics, the University of Montana says only 20 percent of the land designated by this bill is suitable for timber harvest?

Mrs. MALONEY. That is correct.

Mr. ROSE. And how many acres are in the bill, 16 million?

Mrs. MALONEY. 16 million.

Mr. ROSE. So we are talking about roughly 3.2 million suitable for harvest. Thank you. Go ahead.

Mrs. MALONEY. NREPA will protect the habitat of the only woodland caribou herd in the continental United States. The woodland caribou has been described by some scientists as the most endangered mammal in the continental United States.

NREPA will protect the rivers and streams that are the last habitats for many of America's wild trout stocks. NREPA will establish a program to help rehabilitate the Snake River which has been called one of the most environmentally threatened rivers in America.

And most importantly, NREPA attempts to emphasize that all of these places, all of these forests are linked together in the most vital ways possible. The best scientific minds in the Nation increasingly tell us that you can't realistically try to protect these unique lands and everything that lives within them without thinking of the entire ecosystem.

In order to make wilderness protection work, you need to protect enough land to sustain the animals and plants that live within them. And sometimes those biological boundaries cross the political boundaries and State boundaries that we have established.

It would be wonderful if we could teach an eagle in a tree in Montana that you were not supposed to fly over to the tree in Idaho, but animals and plant life recognize natural boundaries.

So this legislation seeks to accomplish the goal of protecting enough land to sustain the plant and animal populations, the pure streams and rivers that currently exist in the five States.

In bringing this legislation before Congress, I am proud to follow in the tradition of New Yorkers like Theodore Roosevelt who gave America the first National Forest System and also the tradition of Mo Udall who lived as far away from the Alaskan wilderness his legislation protected as I do from the public lands designated in H.R. 2638. By having this hearing, I believe we are continuing in that tradition.

I hope you will continue to debate these issues in a thoughtful and responsible way. If nothing else, the American people should take comfort in the fact that we are debating how much land to protect instead of whether to protect land at all.

Two supporters of NREPA who live in Manhattan—Manhattan, Montana, that is—wrote to me and said, "We feel that there is a

little ray of hope for the incredible but dwindling wildlands we are so lucky to live near and love."

We all have a responsibility to sustain that hope. I thank you very much, Mr. Chairman for allowing me to be here and for having this hearing.

Thank you very much.

[The prepared statement of Mrs. Maloney appears at the conclusion of the hearing.]

Mr. ROSE. Thank you. Very good statement. Congresswoman Elizabeth Furse was recognized for an opening statement. Do you have any additional testimony you would like to give at this time?

Ms. FURSE. No.

Mr. ROSE. The gentleman from South Carolina.

Mr. RAVENEL. No.

Mr. ROSE. The gentleman from Oregon, Mr. Smith.

OPENING STATEMENT OF HON. ROBERT F. (BOB) SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. SMITH of Oregon. I thank the chairman for his courtesy for allowing me to sit although I am not a member of the subcommittee. I appreciate that very much. I have an opening statement, Mr. Chairman, that I would like to offer for the record. I just want to make a couple of comments if I may.

Mr. ROSE. Kindly keep it to 5 minutes.

Mr. SMITH of Oregon. It won't take me very long, Mr. Chairman. I know your reputation.

Mr. ROSE. You will be very fair. I know you are a good man of interest in this area. We are glad you are here.

Mr. SMITH of Oregon. I am interested, Mr. Chairman. And obviously one of the areas of the gentlelady's legislation affects Hells Canyon which is in Oregon and is in my district.

The facts are that most of the Oregon lands are already protected by the great hand of Uncle Sam. The fact is, about 85 percent of the timber harvest in the State has been eliminated through option 9 and our Forest Service examples. Hells Canyon is now in the national recreation area and fully protected from any onslaught of even Manhattan people from the Midwest and West.

But the point is, we want to transfer through this bill authority from one Government agency to another, and when we begin to transfer to the National Park System, I think everybody understands that you are transferring to a system that is broke or certainly is way behind, the backlog, for instance, in the Park Service of \$5.6 billion for construction projects, a backlog of \$400 million in operating funds, a backlog of \$1.2 million in acquisition of land already authorized by this Congress and others. So to place another 16 million acres of land under the Park Service is doing an injustice to the land. We can't afford to operate it.

I took the trouble to take a look at New York City. For instance, in fact in New York, there is a lawsuit on right now, but everybody agrees, it is going to cost millions to refurbish the leaking roof and the urine-stained walls at Grant's Tomb. There is a backlog in New York City in the lady's own area of \$230 million.

Now, I am interested in helping her. I want to help fund the backlog in New York City before she extends her great hand of gratitude to the West and to Hells Canyon. In fact, many people may support this, but let's take a look at the local people.

Wallowa County, the little county that Hells Canyon is in by a resolution and a vote, 94 percent of the people opposed a national park. The counties around them oppose a national park. So I am here to reflect the views of a person who lives within this area, Mr. Chairman, who is reflecting the views of people that I represent, and I want to help New York City by funding \$230 million of backlog.

I thank the gentleman for his kindness.

[The prepared statement of Mr. Smith of Oregon follows:]

PREPARED STATEMENT OF HON. ROBERT F. (BOB) SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. Chairman, I'm perplexed that we are spending our time examining a bill that has no broad-based support and no chance of passage.

It appears that Mrs. Maloney's sole qualification for introducing a 16 million acres wilderness bill is visiting Yellowstone National Park as a tourist. This is not serious legislation and we should not waste the taxpayer's money listening to testimony about it.

One of the several poorly crafted provisions in this bill is a National Park Service study of the Hells Canyon area in my district. This area is managed by the Forest Service and it should continue to be managed by the Forest Service. The people of northeastern Oregon strongly oppose even a park study proposal, much less a National Park.

For instance, in a recent vote in Wallowa County, 94% of the voters opposed a resolution calling for a park study. All of the surrounding counties have passed resolutions opposing a park.

Frankly, we can't afford another park even if it had local support. The Park Service has a backlog of \$5.6 billion for construction projects, a \$400 million backlog in operating funds, and a \$1.2 million land acquisition backlog.

So we would be setting up a park that we can't afford, that local residents don't want, and is sponsored by a Congresswoman from Manhattan who probably couldn't find Hells Canyon on a map. This is ludicrous.

The Subcommittees represented here today have a number of important proposals to consider in the final months of the 103rd Congress. This bill is clearly not one of them.

I urge my colleagues to reject this ridiculous proposal.

Mr. ROSE. Let me ask you a question. Does this cover part of what is your congressional district?

Mr. SMITH of Oregon. Yes, it does, sir.

Mr. ROSE. How many acres, roughly, would you guess?

Mr. SMITH of Oregon. Hells Canyon? I am told 600,000 or 700,000 acres.

Mr. ROSE. But these are of course federally owned lands.

Mr. SMITH of Oregon. Federally owned lands in a national recreation area at the time. They are so designated.

Mr. ROSE. Maintained by who?

Mr. SMITH of Oregon. Maintained by the Forest Service. Operated and maintained by the Forest Service.

Mr. ROSE. And it would transfer this?

Mr. SMITH of Oregon. To the Parks Department.

Mr. ROSE. And you think that is a bad idea because, I understand—I am trying to get at the monetary argument. You were saying they are broke.

Mr. SMITH of Oregon. The Park Service, Mr. Chairman, in the current position has a backlog of \$5.6 billion of construction

projects. Now these are their figures, already authorized by the Congress unfunded, a backlog of \$400 million in operating funds.

We can't operate the parks we have. We are way behind on operating funds appropriated and \$1.2 million in acquisition backlog, so what you are saying here—

Mr. ROSE. Would there be acquisition costs or operating funds for this?

Mr. SMITH of Oregon. There would be operating funds, obviously.

Mr. ROSE. I mean, nothing like for wilderness area operating funds wouldn't be anything like they would be for a park, would they?

Mr. SMITH of Oregon. No. But this is—these national recreation areas, some of them—many of them are operating tourism opportunities, so there are construction projects that may be necessary. There certainly are operating funds that you must transfer from the Forest Service to the Parks Department if you are going to do justice to them at all.

Mr. ROSE. Thank you very much.

Any other questions. Mr. Volkmer.

Mr. VOLKMER. Of the witness?

Mr. ROSE. Yes.

Mr. VOLKMER. I would just like to ask the gentlelady how much time in the last several years has she spent in the various States that are encompassed in the legislation.

Mrs. MALONEY. As I said in my testimony, I was there as a young woman many years ago. And many of the forests I saw then have been destroyed.

Mr. VOLKMER. I see. The next question I have, I understand the gentlelady from Oregon who is here supports the legislation. What other members from the States that are involved support the legislation?

Mrs. MALONEY. We have 58 cosponsors from 20 different States—

Mr. VOLKMER. No, I asked—

Mrs. MALONEY. We have over 5 million supporters, many of whom are from the affected States and we can submit to the record those lists of names.

Mr. VOLKMER. I would like to ask you again. Does anybody from Montana support the bill?

Mrs. MALONEY. Not to my knowledge.

Mr. VOLKMER. Idaho.

Mr. ROSE. Members of the House?

Mr. VOLKMER. Members of the House. Idaho.

Mrs. MALONEY. We have a resolution in support of it from a city council from the State of Montana. The county of Missoula, city of Missoula.

Mr. VOLKMER. I didn't ask that question.

Mrs. MALONEY. In support of the question—

Mr. VOLKMER. My question, ma'am, is what Members of the House from the State of Idaho support this legislation?

Mrs. MALONEY. No one.

Mr. VOLKMER. Does a Member from Wyoming support this legislation?

Mrs. MALONEY. No.

Mr. VOLKMER. What Members from the State of Washington support this legislation?

Mrs. MALONEY. None, but many residents do.

Mr. VOLKMER. What Members other than Ms. Furse support this legislation from the State of Oregon?

Mrs. MALONEY. He is certainly capable of speaking for himself. He does not support it.

Mr. VOLKMER. He is just one. We have other Members from the State of Oregon.

Mr. ROSE. But he is an important Member.

Mrs. MALONEY. I have a resolution from a city council. I have several editorials written in several cities. As I said, 5 million organizations and individuals have signed in support of the legislation.

Mr. VOLKMER. Thank you.

Mrs. MALONEY. So the Sierra Club supports this and the National Taxpayers Union supports this, so the support for it is deep and very strong. There is a great deal of support for this legislation from not only the scientific community but from people who live and work there and care about the region.

Mr. VOLKMER. Well, there is probably one area in this legislation that you and I might agree on, and that is that there needs to be an ecosystem approach to the management of our national forests. I came to that conclusion before you ever got to this Congress. I want you to know that.

Mrs. MALONEY. I am glad to hear that.

Mr. VOLKMER. There are other people within the Forest Service that came to this conclusion about 5 years ago, and they have started an ecosystem approach to management.

My next question is: Have you discussed this legislation, what you are proposing here, with the gentleman by the name of Jack Ward Thomas?

Mrs. MALONEY. I have discussed it with the national Forest Service.

Mr. VOLKMER. No, I asked if you have discussed it with Jack Ward Thomas.

Mrs. MALONEY. Jack Ward Thomas. Who is he?

Mr. VOLKMER. That is what I thought. That is just what I thought. Jack Ward Thomas is the Chief of the national Forest Service. Jack Ward Thomas—

Mrs. MALONEY. I discussed it with several people who work for him.

Mr. VOLKMER. Jack Ward Thomas is the person that started, I guess, most of the people in this country, in Government at least, on the road to an ecosystem approach to management of a national forest and that was precipitated by the spotted owl controversy in Oregon, northern California, and the State of Washington.

I and other members of the former Subcommittee on Forests, Family Farms, and Energy of the Agriculture Committee along with the gentleman from Oregon have worked for several years and this is not the first legislation that has ever been introduced proposing an ecosystem management approach to our national forest because this gentleman actually introduced and got out of this Congress out of this House—this committee, excuse me, and to the

floor what was never taken up on the floor because of opposition from the chairman of the Interior Committee.

We never got it going because the Interior Committee didn't report their bill out having to do with regions 5 and 6 of our national forests. That legislation did approach and did call for an ecosystem management approach for the national forests in regions 5 and 6.

Do you know where regions 5 and 6 are?

Mrs. MALONEY. In the northern Rockies.

Mr. VOLKMER. Northern California, Oregon, and Washington, that is correct. Now, some of us feel very strongly that we need to do what some of us propose and have been trying to do for several years, and I don't disagree with you on that. I agree with you.

I disagree as to the approach that is being taken by this legislation and not trying to work with others within the system who have come to the same conclusion in attempting to bring about a ecosystem management to our national forests.

Mrs. MALONEY. Well, it depends how you define an ecosystem management. You can call a clearcut—I believe that bill supported clearcutting and we are for maintaining the ecosystem not for clearcuts. And we met with the national Forest Service and they submitted testimony earlier and they claim they do not support this bill, that they feel that the present system is fine and that we should follow State boundaries. That was an earlier submission. The Forest Service called this a temporary measure.

Mr. VOLKMER. I would have to agree with the Forest Service as far as opposition to this legislation. And I quite agree that it could be done in other ways and better ways than this legislation.

Mrs. MALONEY. Well, that is what we are having now is a debate and a discussion on the last remaining forests in America, Federal forests.

Mr. VOLKMER. Thank you, Mr. Chairman.

Mr. ROSE. Thank you, Mr. Volkmer.

Before I yield to the gentlelady from Oregon, I just want to observe, I did not realize, as you said in your testimony, that it was New Yorkers like Theodore Roosevelt who gave America its first National Forest System. Was he one of the originals?

Mrs. MALONEY. Yes. He proposed it.

Mr. ROSE. And then you mentioned Mo Udall who lived as far away from the Alaskan wilderness his legislation protected as you do from this area.

Mrs. MALONEY. Yes.

Mr. ROSE. Is that correct?

Mrs. MALONEY. Yes, that is correct.

Mr. ROSE. The gentlelady from Oregon is recognized.

Ms. FURSE. I just wanted to respond a little bit. I am so pleased that you also support Chief Thomas. I think he is an outstanding scientist.

I did just want to say that I think although some Members have not cosponsored this legislation, this doesn't necessarily mean that they don't support it. I am not a cosponsor of this legislation myself, either, but I think that the support might be there whether the cosponsorship is or not.

Thank you, Mr. Chairman.

Mr. ROSE. Any other comments?

Yes, sir.

Mr. GOODLATTE. Mr. Chairman, thank you. I just have one question for Mrs. Maloney. Can you tell me what becomes of the private property owners who are caught in these biological connecting corridors that are established to allow wildlife to travel.

Mrs. MALONEY. We are talking only about Federal lands. It does not take any private lands at all and that is totally the vast majority of the corridor area is Federal land. Some areas are privately owned but these owners do not have to comply if they do not wish to.

The bill explicitly states that the management direction established by this section shall apply only to lands administered by the U.S. Forest Service, the Bureau of Land Management, the U.S. Fish and Wildlife Service.

This bill would not take any private property rights, major highways and private roads. You are expressly exempted from this section and will not be affected, so it does not affect private property at all.

Mr. GOODLATTE. Thank you.

Mrs. MALONEY. It is only Federal land owned by the Federal Government by all American citizens.

Mr. RAVENEL. Mr. Chairman.

Mr. ROSE. Yes, the gentleman from South Carolina.

Mr. RAVENEL. Mrs. Maloney, since the issue of Hells Canyon has been raised, can you tell us—of course I am a cosponsor of the legislation. Can you tell us what significant changes would occur in that area?

Mrs. MALONEY. The Hells Canyon area includes the Hells Canyon National Recreation Area. A recent General Accounting Office report showed that the Hells Canyon NRA is severely mismanaged and a change in management agency would, I believe, more properly protect this national treasure that has outstanding park values. And that is why it is a study. It is a study. It is not an official move. It is a park study.

Mr. ROSE. The gentleman from South Carolina, would you yield?

Mr. RAVENEL. Yes, sir. I yield to the gentleman from Oregon.

Mr. SMITH of Oregon. I thank the gentleman for yielding. One of the battles we have had with the whole question of funding for recreation areas and national parks is the priority of funds. Now, in Hells Canyon, some may say it is mismanaged, but that denies the fact that the Forest Service for the last 15 years has had in their budget requests for funds to upgrade the management of the NRA.

All of this has been stricken out by Congress. So to say that the NRA in Hells Canyon is mismanaged, is to blame the Congress because we have been applying for years, as have many of these other parks in New York and all around the country, parks have been applying for funds that aren't funded. The Forest Service has been applying for funds that were never given.

So I think it is a wrong direction to castigate the Forest Service since, really, the Congress has not come up with the funding to properly manage the NRA in Hells Canyon.

Mr. ROSE. I thank the gentleman for his contribution. I want to thank the gentlelady from New York for her testimony and we hope you will stay with us.

Mrs. MALONEY. Thank you very much, Mr. Chairman. I really appreciate it. Thank you.

Mr. ROSE. You are very welcome. I hope you can stay with us for the remainder of the hearing if possible.

Our second set of witnesses is a panel composed of Mr. Mark Reimers, the Deputy Chief for Legislation, Forest Service, U.S. Department of Agriculture, Washington DC; and Mr. James W. Stewart, Assistant Director for Planning, National Park Service, Department of the Interior, Washington, DC.

Now, my staff is a little concerned, Mr. Reimers, that we had a very hard time getting testimony from you folks on time. Are you aware of that?

Mr. REIMERS. Yes, I am aware of that and I apologize.

Mr. ROSE. Well, how many times have you apologized now? Isn't this the fourth or fifth time, Mr. Reimers?

Mr. REIMERS. This is the first time I have personally done it, but I am aware that our testimony has been late to this committee.

Mr. ROSE. Would you look into that?

Mr. REIMERS. Yes, I will.

Mr. ROSE. I am not saying we are going to have four strikes and you are out or three strikes and you are out, but you know we deserve to have your testimony in time for the staff and Members who want to take a look at it. And I am going to take your word on the record that you will look into it, and please see that it doesn't happen again.

Mr. REIMERS. Yes, sir. Thank you.

Mr. ROSE. All right. You may proceed.

STATEMENT OF MARK REIMERS, DEPUTY CHIEF, LEGISLATION, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE

Mr. REIMERS. I will just highlight my testimony since you have it before you.

I appreciate the opportunity to present the views of the Department of Agriculture concerning H.R. 2638, the Northern Rockies Ecosystem Protection Act of 1993. The Department of Agriculture recommends that H.R. 2638 not be enacted. As has already been discussed, as indicated in my testimony, it would involve considerable designations of wilderness, of wild and scenic rivers, and a number of other provisions of the bill that have been previously discussed.

As has been acknowledged by some of the Members, H.R. 2638 is a very ambitious bill and it represents a dramatic departure from previous approaches to wilderness in special area designations.

As you are aware and as has been discussed, led by the congressional delegations of affected States, the State-by-State approach to wilderness designation used since our two studies has provided an important local and national perspective.

The Forest Service role has been to provide information concerning the resource trade-offs and other management implications of

potential wilderness designations. Statewide wilderness bills have already been enacted in Wyoming, Oregon, and Washington and involved considerable discussion in each of those States. The Montana and Idaho delegations are currently working on statewide bills for their respective States. And as you will recall, this committee or the full committee reported out the Montana bill last week.

Using this deliberate process has resulted in a high quality national wilderness preservation system which enjoys the support of both local and national interests. As part of the forest planning process, the Forest Service makes recommendations on wilderness. After nearly 16 years of work on the Montana wilderness issue by the Montana delegation, a bill of about 1.7 million acres of wilderness has been ordered reported by the Committees on Agriculture and Natural Resources.

H.R. 2638 proposes doubling the acreage for wilderness designation, plus an additional 2.4 million acres of wilderness associated with biological connecting corridors for Montana.

H.R. 2638 appears to bypass existing processes and laws. This bill would set aside the National Forest Management Act process and the outcomes which strive to strike a balance between preservation and development. This would mean that efforts to develop forest plans in consultation with the public would be set aside in favor of the approach taken by the bill.

We acknowledge and share some of the concerns of the proponents of this bill. These concerns, along with our management experience have led us toward the ecosystem management approach being pursued by the Forest Service. The Chief of the Forest Service has stated that one of his primary goals is to quickly and effectively implement ecosystem management in the national forests.

We have initiated several broad-scale assessments as a means to strengthen forest plans and have used this approach in developing the President's forest plan for the Pacific Northwest, and for addressing concerns over salmon in the west coast river systems, commonly referred to as PACFISH.

We believe the concept of biological connecting corridors is best considered in the context of the land management planning process. In that process, you need to look at a number of considerations. In dealing with biological connecting corridors, some questions we face include: What corridor dimensions and conditions are necessary to serve the needs of particular species; what kinds of treatments and activities are compatible with the purposes of any corridor; does the corridor materially enhance the survivability of stressed wildlife populations?

As we look at the characteristics of species or habitat, it is important to see it in a broader context than just designated biological corridors. It is important to see it in the context of not only the entire national forest but composites of national forests.

In summary, we find this bill seems to disregard previous legislation of the Congress. As such, it would circumvent the processes set in motion by existing law where they address the complex issues of wilderness ecosystem protection, biological diversity, and other management issues not easily resolved.

This bill would ignore the processes of forest planning, wild and scenic river study and designation, and research in its application to management issues.

That concludes my statement. I would be happy to answer questions.

[The prepared statement of Mr. Reimers appears at the conclusion of the hearing.]

Mr. ROSE. Thank you, Deputy Chief Mark Reimers.

Mr. Stewart, we will be happy to hear from you now.

STATEMENT OF JAMES W. STEWART, ASSISTANT DIRECTOR, PLANNING, NATIONAL PARK SERVICE, U.S. DEPARTMENT OF THE INTERIOR, ACCCOMPANIED BY KEITH CORRIGALL, CHIEF, DIVISION OF WILDERNESS, BUREAU OF LAND MANAGEMENT

Mr. STEWART. Thank you, Mr. Chairman. I appreciate being here before these two subcommittees, Members and visitors and other Members of Congress. I have with me this morning Mr. Keith Corrigall who is with the Bureau of Land Management and can speak to any bureau issues on wilderness.

The Department recommends that H.R. 2638 not be enacted. Because this bill would affect primarily lands administered by the U.S. Forest Service, we would generally defer to their remarks and views of the bill. The areas identified in section 6 for study as possible national parks and preserves or the Hells Canyon, Chief Joseph National Park and Preserve, and the Flatland National Park and Preserve.

These areas undoubtedly contain natural and cultural resource values of great significance. However, they are already, as pointed out earlier, administered for conservation purposes by the Forest Service. The Wild and Scenic Rivers Act provides that the U.S. Forest Service is responsible for conduct of river studies on rivers flowing over national forestlands.

We recommend that this practice be continued, and that is that the Forest Service study the Smith and Middle Fork Judith Rivers and Rock Creek rather than the Secretary of Interior which I believe the bill calls for. The Yellowstone River study, which we support, should be a joint study between the National Park Service and Forest Service.

That concludes my testimony. I would be happy to answer any questions.

[The prepared statement of Mr. Stewart appears at the conclusion of the hearing.]

Mr. ROSE. Thank you very much.

Mr. Ravenel, any questions?

Mr. RAVENEL. I have one for Mr. Reimers. Who in your organization really is in overall charge of the cutting that has been going on in the ancient forests out there in the Northwest?

Mr. REIMERS. Well, the Chief of the Forest Service is responsible for the programs that are carried out. John Lowe is the regional forester in region 6 and would be responsible to the Chief with regard to that.

Mr. RAVENEL. The reason I ask you that is, I think 2 or 3 years ago, I went out to, of course this is a—this area is not affected by

this legislation, but it is kind of parallel—and I went out and took a look at the cutting that was going on in the national forest surrounding the Olympic National Park.

Have you ever seen that operation out there?

Mr. REIMERS. Yes. I have been on the ground and seen some of the harvest on those and other national forests.

Mr. RAVENEL. Yes, sir. Well, quite frankly, I was unprepared for the devastation that I saw up there. What you are all doing or permitting to be done out there in the Olympic National Forest is really a crime against nature. Those slopes out there are very severe. We saw in some areas the logs can only be lifted out by helicopter.

They clearcut everything right up to the borders of the park, as you know. And where they could use bulldozers, they did, or fire and they burn what rubble is left. And the erosion from the rains has just scarred those slopes, those severe slopes where those marvelous, wonderful trees used to exist. The little streams are all stopped up with mud and silt.

I just wanted to take this opportunity—I do it at every instance. If I had not been there myself and seen it, I would not have believed that an agency of the U.S. Government could permit such an outrage to be perpetrated. I just want to tell you that.

Mr. REIMERS. I appreciate your concern and recognize that when you look at an area that has been harvested by whatever means, that it does have a severe aspect to it. We have been strongly committed to the reforestation of such areas.

I think that you are aware that our policies have moved strongly away from clearcutting and, because of the effects that it has had with regard to the Pacific Northwest, as Congressman Smith could tell you, there has been a dramatic change in the direction.

The President's plan for this area is much more protective. It has been based on the best scientific information we have. We are moving in a way that I think is responsible with regard to the ecosystem considerations in that area. I feel comfortable that the kind of management that we will have in the future will meet the kinds of concerns that you have.

Mr. RAVENEL. You say you witnessed that butchering up of those national forests yourself right outside the car?

Mr. REIMERS. Yes. No, I wasn't right up against the park. I had an assignment in region 1 in Missoula, Montana. I have been on forests in Oregon and Washington on the ground. I have been on a clearcut that has been harvested. I have been on a clearcut that has been reforested. I have seen the wide range of conditions and I can understand some of your concerns.

Mr. RAVENEL. Of course, you know when you cut an area like that, and then you replant, you do not restore the biological diversity of the fauna and flora in that area. I mean, what you do is you can convert an area of great floral diversity to really which is then a free farm.

Mr. REIMERS. Yes, I understand. And you are correct that when you have harvested in an old-growth area, it is changed. The new plans are protecting more old growth than we had envisioned in the past. Also, other areas that are still devoted to timber harvest in the Pacific Northwest will continue to be harvested for products and be reforested. We do need a mosaic of lands.

When you look at the landscape, they should not all be harvested. Land should be protected and there is a significant acreage in wilderness. Other lands can be used for other purposes. The important thing and what we are trying to do as we look to the future is to look at a mosaic of land on a broad scale and choose those management practices and those uses that meet both the needs of the present and future generations.

Mr. RAVENEL. Thank you, Mr. Chairman.

Mr. ROSE. Mr. Volkmer.

Mr. VOLKMER. Thank you, Mr. Chairman.

I have several questions, Mr. Reimers. Has the Forest Service changed their methodology of management of our national forests within the last 5 years?

Mr. REIMERS. Yes, I think significantly. The direction was broadcast, you might say, in 1992 with regard to reduction in clearcutting and an emphasis on ecosystem management. That is not to say that that didn't occur in places in the past. I was trained as a young forester in the principles of silviculture and ecosystems, so it is a long-standing history within the natural resource fields.

But the emphasis in looking at broad landscapes and across multiple boundaries as even this bill suggests is very important. When you think about an ecosystem, you can think about it on all scales. It is important that we consider both the broad scale and the more specific scale. So, yes, there has been significant change and a major emphasis on looking at the broad scale as has been done with the President's plan, as we are doing with the salmon, as we have done with individual species under the Endangered Species Act.

Mr. VOLKMER. The next thing that I would like to ask you about, as you have developed within the Forest Service this new management process, has anyone come up with knowledge as to whether or not we know everything we need to know about our forest ecosystem, or do we need additional knowledge and research into the ecosystems?

Mr. REIMERS. We need major new knowledge. The Chief would be the first to point out that we are still learning. We need to learn. He has emphasized accelerated research. One of the major modes in the Pacific Northwest is adaptive management in which we not only look at new management, but we monitor and evaluate.

Mr. VOLKMER. When you first had the original Jack Ward Thomas report on the spotted owl and then following that the "Gang of Four Report," one of the things in my discussions with the scientists who brought up those reports was our lack of knowledge, so much lack of knowledge that so much research and understanding that we need to do in order to perform better. Is that right?

Mr. REIMERS. That is correct.

Mr. VOLKMER. And sometimes some people come up with what I call simplistic answers to very complex problems within our national forests, and I am afraid that some of those people are not fully knowledgeable of how much knowledge we don't know about our national forests.

You don't have to comment on that. That is my comment.

And the other thing that some people think that if we just don't cut the trees and we do nothing else, that the forests then are going to be in a natural state. But we do other things within those national forests or we don't permit other things to happen that happened in nature. That makes a change in that forest.

What about fires? Do we just permit the fires to continue to burn and burn and burn wherever they start? That is nature. Do we permit that?

Mr. REIMERS. No, we don't. One of the dramatic things that we are learning is that all ecosystems, even in wilderness or whether they are managed, are subject to conditions of fire, the concerns for fire protection, the concerns of insect and disease attack. And so in any given setting with any kind of mosaic, you need to look at the management practices that will best accomplish the public's objective.

Mr. VOLKMER. So what we have is that we are already interrupting nature's ecosystem with other management that is dictated, in my opinion, by the fact that we do have people living within these forests. We have in-holdings. We have cities around and things that we are just not going to permit a huge conflagration that may have occurred 100 years ago or 75 or 200 or 500 years ago when, like in the Northwest up in region 6, the large part of it was completely destroyed by fire.

We are not going to permit that anymore, are we? We are not going to permit the cities of Salem, Oregon, and other places just to burn down in order to preserve an ecosystem.

Mr. REIMERS. That is right. And many people, as they think of the national forest, think of it as if it was a blocked-up ownership but that is not the case. In the history of our country, many of the prime farmlands within the national forest boundary are in private ownership. There is private ownership of forested lands and we have to manage in a way that respects our adjacent landowners and provides them protection as well as those lands that are Federal resources.

Mr. VOLKMER. Right. And insects and fire, just like forests, don't stop at forest boundaries and we have national forests that are adjacent to private forests, and State forests. And therefore, if we are going to do something about insect population, we can't just do it one place and not another to control insect population, do we?

Mr. REIMERS. No. Both our insect and disease and fire programs have to be cooperative programs with State and local authorities.

Mr. VOLKMER. Mr. Chairman, could I have just a little more time?

Mr. ROSE. Yes.

Mr. VOLKMER. Let's look at the State of Montana just for a few more minutes. And as one who has worked with that Montana delegation to try and work out a wilderness legislation, and as one who has had many hearings on that State, I find that if my memory serves me right, there is a lot of land in Montana that is forest land in the Rockies that is owned by private concerns and one major private concern; is that not correct?

Mr. REIMERS. Yes. There is significant forested land in Montana in a number of private ownerships.

Mr. VOLKMER. And a lot of that goes back to the days when they had the railroads through, and you had one-quarter in one place and—

Mr. REIMERS. That is correct.

Mr. VOLKMER. We have a checkerboard approach, do we not?

Mr. REIMERS. That is correct.

Mr. VOLKMER. And a lot of those lands up there that have been clearcut have been clearcut by those private companies and that one major private company; is that not correct?

Mr. REIMERS. That is correct.

Mr. VOLKMER. And this legislation in no way addresses that problem, does it?

Mr. REIMERS. As the Congresswoman indicated, if the bill only applies to Federal land, it wouldn't deal with any of those questions on private land.

Mr. VOLKMER. Correct. And since there is a checkerboard approach and we are taking an ecosystem approach, how do you take an ecosystem approach to an area where you are still permitting all this clearcutting to occur?

Mr. REIMERS. One of our difficulties, as we look at any ecosystem, is the relationship with private land and private owners. And in the West, to large measure, any controls on private lands are the subject of State law or local law, not to Federal law.

Mr. VOLKMER. What I am trying to get to is that there is no question that the Forest Service is right now going down the right road of taking the ecosystem approach, but it is just not that easy to do it. It is not simplistic because of the multifaceted problems, the complexities that are caused by land ownership in various areas, but suppressions of fires and disease and other things that naturally occur.

And so if you are going to have an ecological approach, then you have to take those things into consideration, do you not?

Mr. REIMERS. That is correct.

Mr. VOLKMER. So adjustments have to be made to the natural ecosystems, and that has not occurred because natural ecosystem is not occurring?

Mr. REIMERS. One of our greatest difficulties in the area that this bill addresses is the historic role of fire and the fact that in order to protect the forestlands, we protected it and conditions have changed from what they would have been before fire control occurred. But it is still necessary and we have to learn how to deal and work with an ecosystem under the changed circumstances.

Mr. VOLKMER. All right. Now, the gentleman from Oregon, I am looking at him right now, and he has worked with me on much of this legislation knows full well because I have been out through all of these States and visited and spent a great deal of time—probably more than people in my district appreciate.

But one of the things that I have found as a result of, oh, I would say some approaches to management of areas where you have diseased, dead trees, like in eastern Oregon, that we now have a massive buildup of deadwood that does lead to conflagration; is that correct?

Mr. REIMERS. That is right. That is a major concern.

Mr. VOLKMER. And if that conflagration does occur, that the heat from that conflagration can be so great that soil is going to be dead; is that correct?

Mr. REIMERS. Yes. The heat could go down into the soil, kill the microorganisms and other things.

Mr. VOLKMER. And then your gentleman from the Carolinas was talking about mud and everything else. There is going to be a whole bunch of it if they get the rains. The problem, they probably don't get the rains, maybe they have dry desert out there. But these are some of the problems as I see it with the ecosystem approach, just without really studying an ecosystem approach to management.

Thank you very much.

Mr. REIMERS. Thank you.

Mr. ROSE. Thank you very much. Any questions?

We will need to move along. If you would hold your questions as short as you can, we would appreciate it. We have another panel after this one.

Mr. GOODLATTE. Thank you, Mr. Chairman.

Mr. Reimers, I have been impressed with the size of this land area that we are talking about. I represent an area of Virginia that is about 5,000 square miles, about the size of the State of Connecticut. The Federal Government owns in national forest land about one-third of that land, about 1,500 square miles 1 million acres.

Here it is 16 million acres. We are talking about more than 20,000 square miles of land larger than the State of South Carolina that we are going to completely lock up from any use by people in the area.

This is in my district, forestry products between furniture that we all use that we are sitting on here today, paper products that we are all using here today, houses that we all live in. It is the second largest source of employment in my district from all those uses of timber, and if we were to shut off any access to—all access to public land for that purpose, we would have a devastating impact on our economy and would put tremendous pressure on the privately owned land which would have to be the sole source of any timber supply.

Two questions in regard to that. First, what impact is this going to have economically on this region of these five States?

Mr. REIMERS. Well, we haven't done a complete analysis of all the impacts of designation of these corridors and this amount of wilderness. We haven't had those kind of detailed maps or have been asked by the committee to do that kind of a broad analysis. But clearly our preference is to be able to look at these roadless lands. Say, for instance, they are in these corridors, look at them in conjunction with the adjacent national forest and allow them to both protect the ecosystem but also allow a flow of goods and services from those lands.

So there would be effects on production of timber. It would have effect on millions. We don't have any overall calculation of the magnitude of that effect. I think the greater concern would be that we need to be able to manage these national forests and groups of national forests in a comprehensive way rather than taking specific corridors or other lands and putting them in special categories.

Now, we acknowledge that Congress designated wilderness and designates wild and scenic rivers, but the National Forest Management Act prescribes that we would manage the rest of those lands, including the wilderness and wild and scenic rivers, in a composite way to best meet the public's needs and provide benefits.

Mr. GOODLATTE. The second part of that is what my understanding is as opposed to the national parks, the national forests were created for diversity of uses including renewable natural resources. And last year there was a lot of discussion in the administration that concerned me about cutting off all timber sales in 56 different national forests, that I understand the administration has not proceeded with.

And I think that is wise that two of the national forest in my State would have, again, been heavily impacted by that decision. But what effect does it have on the economy when we discontinue in a dramatic way the availability of our public lands as a source of forestry products on private lands and on the overall economy of the country?

Mr. REIMERS. Well, the situation in large measure varies from place to place and State to State. In some cases, you can make a shift to private lands and the harvest continues. In other places where the predominance is Federal land or where the private land has already been harvested, then you are just faced with a short supply and a mill can't continue.

Mr. GOODLATTE. We are going to still have a situation where we are cutting trees, in some instances clearcutting trees, but it will be in one place on private land that people drive by an look at instead of on public land where people drive by an look at it.

The real issue is management of land and going so wisely rather than putting cross pressures on one sector of the country or one sector of the economy over another which I think this bill would do.

Mr. REIMERS. Well, you are correct, and we have specific statutory authority to look at the overall supply and demand situation on forested lands and identify the opportunity for renewable resource products on both Federal and private lands.

Then the question is: What do the American people demand and where will it come from?

Mr. GOODLATTE. But your ability to make those management decisions is hindered when this amount of land 25 times the size of the State of Rhode Island, eight times the size the State of Connecticut, 100 times the size of the city of New York where 7 million people live in locked up and completely excluded from those considerations; is that correct?

Mr. REIMERS. That is correct.

Mr. ROSE. Thank you.

Mr. Tauzin from the Merchant Marine Committee.

Mr. TAUZIN. Thank you, Mr. Chairman.

Perhaps I can go to Mr. Stewart and, Mr. Reimers, you can help me. As I read this bill offered by the gentlelady from New York and colleagues from South Carolina and California, I am a bit concerned that it designates in these corridors, areas of lands that are now owned in private ownership.

There is a section that indicates that the corridors do not apply to those lands in private ownership. It follows the second section entitled the "Roadless Lands Evaluation" which does not have that exemption and which prohibits completely the gathering of any wood, construction of any roads, prohibits completely oil gas lease, mining, or other developments unless Congress would come back and allow it later.

I am asking you for your interpretation of section 5 on page 34, which does not have the private landowner exemption. As I read it, it seems to imply that private landowners in the middle of these areas or adjacent to these areas are going to be covered by these absolute prohibitions.

Am I right or wrong?

Mr. REIMERS. In our reading of the bill, it is not at all clear with regard to the connecting corridors or biological corridors the intent with regard to private land. We don't have the maps of that, and you are correct, our reading of the bill does not provide a specific exclusion.

The sponsor of the legislation indicated her intent that it not apply to private lands, but we wouldn't get that yet either from any maps we have or the language of the bill at this point in time.

Mr. TAUZIN. Mr. Stewart do you have a different interpretation?

Mr. STEWART. No, sir; I do not. It is a complicated question when you don't have enough information about the exact situation, and what has to be done is find specific information about each tract.

Mr. TAUZIN. I read on page 31 that roadless lands identified as part of these connecting corridors or designated as components, noninventoried roadless lands, while not part of the system, are nevertheless covered by these absolute restrictions. Roaded lands that are not necessarily part of the system are also covered, and then there follows an exemption for certain roaded land.

I can't tell from a reading, and I assume we can't until we see maps whether, there were other roaded lands that are not exempted and, therefore, covered under these strict management systems. But I am even more particularly concerned that when you pull up section 5, which is a separate section not covered by the private land owner exemption, that you clearly have a prohibition that until Congress determines otherwise no new road construction or timber harvest shall be allowed—no leasing mining or other development which interferes with the natural roadless quality of land shall be allowed either.

That seems to apply to everything which is not designated as a component of the national wilderness protection system under this act. You read it carefully.

It says uninventoried roadless lands within the national forest which are not designated as components of the National Wilderness Act. I take it to mean lands in addition to these 20,000 square miles that are designated. All these other lands not designated are suddenly subject to this prohibition without an exception for private lands.

As I read that, that extends the boundaries of this national wilderness preservation system way beyond 20,000 square miles and directly restricts private land ownership in these areas without the

requirements of land swaps or acquisition that is provided in the previous section.

As I read this, I don't know whether it is inartful crafting or it is designed as a separate section to accomplish this purpose. As I read it, there are no restrictions on the boundaries of this thing so long as they are part of the uninventoried roadless lands within the national forest. If I am wrong, I wish you would correct me.

Mr. REIMERS. We have the same difficulty you have in knowing the scope and intent of this section.

Mr. ROSE. Can I ask a question? I am sorry you are all having difficulties, but roadless areas only applies to Federal lands; is that not correct?

Mr. REIMERS. Well, that is the only place we have inventoried it. It could be inventoried on private lands and there could be—but, yes.

Mr. TAUZIN. If the chairman will yield. It specifically says uninventoried roadless lands. Therefore, it could very well include all the private lands.

Mr. ROSE. Then I would think it would be very easy to correct that. It certainly, from my conversation with the cosponsors, is this was not to apply to Louisiana, to North Carolina, or to anyplace that didn't have a national forest in it. It was to apply to the federally owned lands and that should be clarified.

Mr. TAUZIN. If the gentleman would yield. I have no doubt that it doesn't apply to Louisiana as it doesn't apply to South Carolina or New York or California where the authors live. I have a concern that where it does apply—the States of Idaho, Montana, Oregon, Washington, and Wyoming—it reaches out to include noninventoried roadless without an exception for private land ownership and specifically provides nothing shall occur on them, virtually nothing, until Congress specifically allows it. It seems to me to be a broad restriction and a broadening of the delineated wilderness protection preservation system well beyond its boundaries.

Mr. ROSE. On page 32 of the bill, lines 3, 4, 5, and 6, the provisions of this section shall apply only to lands under the jurisdiction of the U.S. Forest Service.

Mr. TAUZIN. I am reading the next section. And while I agree that that section you just read is an exception for private lands covered by language in that section, go to page 34 where you have an entirely new section. It broadens the scope without such a private landowner exemption and, as I read it, extends the absolute prohibition of activities under this act to private lands included in this so-called noninventoried roadless land area.

Mr. ROSE. Well, as it says in the Bible, "Let not your heart be troubled." If this bill comes to a mark up, I would offer an amendment to correct that to meet your concerns.

Mr. TAUZIN. I thank the Chair. My heart, however, remains troubled by other very big concerns such as whether or not all the exempted roads are properly exempted. My heart remains troubled by the expansive nature of this as apparently the Department is also.

And the effect of these corridors upon private land use where traditionally people have lived and raised their families for generations is that and we are now going to tell them you are in a corridor and suddenly the Government has a bigger interest in your land than you have.

I have deep concerns, and I think those concerns are echoed by the agencies at the table.

Thank you, Mr. Chairman.

Mr. ROSE. All right. Any other questions? If not, we would like to call our next panel and thank our witnesses for being here.

Mr. SMITH of Oregon. Mr. Chairman.

Mr. ROSE. Yes.

Mr. SMITH of Oregon. Mr. Chairman, I think the gentleman from Virginia put his finger on this issue, and I want to ask Mr. Reimers a question after I background this just for a moment.

Historically, the Northwest has provided about 50 percent of the softwoods for American uses. Currently, with the option 9 and the current practices, that has been dropped to about 10 percent, but the 10 percent is not harvestable because it is in the courts. So we are harvesting literally no timber from public lands.

The State of Washington, for instance, has 60 percent private lands, 40 percent public lands. Oregon is just the reverse: 40 percent private, 60 percent public, unlike the States of North Carolina, South Carolina, Missouri, Virginia, and others who came into this Union owning most of their land.

Most of the land in the West is owned by the Federal Government. We made a bad deal. The result was that this is an area that is producing and has most of the country's wood. That is not available today and we have seen the result. He is calculating lumber prices, and with the source of timber available for the use of this from other parts of the world, it is very difficult to identify. I am getting to the question, Mr. Reimers.

Our headlong effort to protect public lands—at all costs, tie it up—has resulted in this, Mr. Chairman. It has resulted in a clear-cut of the private lands in the West to keep up with the market and to sell those logs to anybody at the highest bid. What has that done to the environment, Mr. Chairman?

The gentleman from Missouri has accurately identified the patchwork kind of ownership in the West. If you protect one section and the result of your protection is to clearcut the next one to it, what have you done for the overall ecological problems that we all talk about? You have destroyed it.

So my question to Mr. Reimers: Have you witnessed an increased harvest from private lands in the West and what, in your opinion, has that done to the ecological balance that Jack Ward Thomas and all the philosophers want to achieve.

Mr. REIMERS. I can't really answer the question. I recognize that there has been some increased harvest on private lands and we continue to be dependent on supplies from Canada, and so, obviously, to the degree that we are still consuming, timber is being harvested, and that has some of the same concerns for the people of the United States as the concerns that we have had on some of our public lands. So we have to be concerned about the condition

of all lands and how we protect a reasonable environment and meet our needs for products.

Mr. SMITH of Oregon. Mr. Chairman, just one more statement. Bills like this and our other efforts to try to protect the great ecological problems in the West, in my opinion, I will predict you will be sitting here—likely I won't—you will be sitting here when this committee will be trying to determine how can we control logging on private lands because you want to protect the ecology of the area.

You will be doing this, and I directed the thought of it, but it will happen. So this will come down to a private-public battle about who and how the Federal Government should manage private lands.

Mr. VOLKMER. Would the gentleman yield just for that? There is no question to put the pressure on the private lands. If the gentleman will remember, back when we were debating and working our way through on regions 5 and 6 and then we saw the export of logs to the Far East from the private lands, that there were attempts and discussions by some Members to stop that export from private lands. Remember?

In other words, they even wanted to go and say that we should stop that private individual from the use of his property in order to protect public property. Of course we rejected that.

Mr. SMITH of Oregon. Thank you.

Mr. ROSE. I am going to take the last question because we have to move on and it is just a short one for Mr. Reimers, and I am not sure I know the total answer to this.

If the charge for cutting in these public lands was at actual cost to the Government, instead of at a reduced rate, would there be cutting?

Mr. REIMERS. I guess the question is, if we put some sort of a floor under it. I mean, the timber is offered competitively and bid on competitively, so it bears the market cost to the degree it can.

Now, the question that has been behind the below-cost sales controversy is the amount that we may expend in terms of preparing a sale to sell, and if those costs exceeded what we get when we sell it.

Mr. ROSE. There is a rather large debate on that. And you don't agree that the cash expenditures have exceeded cash receipts by a ratio of about 3 to 1 on average over the past decade?

Mr. REIMERS. No, I wouldn't agree in terms of our whole system. In terms of all lands, there are forests. When you look at a program on a forest, that you look at how costs have exceeded what we take in. Under ecosystem management, though, there is going to be less concentration on that kind of a relationship and a greater concentration on forest health.

Mr. ROSE. I was just asking the narrow question. The Congressional Budget Office domestic discretionary spending, page 121 says, "Cash expenditures has exceeded cash receipts by a ratio of about 3 to 1 on average over the past decade."

So the thought occurs to me, you cut out those kind of sales, i.e., stop them as you would if you put this land in a wilderness area,

or the ecosystem protection, that the Ecosystem Protection Act contemplates that you would actually save money. That seems to be while the national taxpayers group was supporting this legislation.

I am just probing. I am not a cosponsor of this bill. I am trying to look at it from all sides, but wouldn't Government be better off financially? I mean, all these other results could occur that Mr. Smith is worried about, and I share his concerns, but wouldn't the Government in a cash position be better off if there were no cuttings?

Mr. REIMERS. I don't believe so.

Mr. ROSE. Why not?

Mr. REIMERS. Well, I need to look at the specific page that you have there and—

Mr. ROSE. It is 121 of the discretionary domestic spending, chapter 3.

Mr. VOLKMER. Would the gentleman yield on that?

Mr. ROSE. Yes.

Mr. VOLKMER. Maybe I could help.

Mr. ROSE. Let me ask you, would you get back to me with a letter explaining why you don't agree but are not sure why you don't agree.

Mr. VOLKMER. Mr. Chairman.

Mr. ROSE. Yes, Mr. Volkmer, I will yield to you.

Mr. VOLKMER. Well, doesn't that apply to all of our national forests?

Mr. ROSE. Sure.

Mr. VOLKMER. Not just those encompassed in the bill.

Mr. ROSE. No, I think—

Mrs. MALONEY. Seven of the nine national forests.

Mr. ROSE. In the National Forest System, in seven of the nine National Forest System regions, annual cash receipts from—

Mr. VOLKMER. Seven of what nine. What seven?

Mrs. MALONEY. For example, in these, of those so-called—

Mr. VOLKMER. How many of them are west of the Mississippi and how many of them east?

Mr. ROSE. For example, of these so-called below-cost timber sale regions—the Rocky Mountain, northern, and inner mountain—cash expenditures have exceeded cash receipts by a ratio of 3 to 1. On average over the past decade, actual timber program costs in the three regions still exceed annual timber receipts if the Forest Service expenditures for road constructions are excluded.

Mr. VOLKMER. Are excluded. Fine.

Mr. ROSE. I am just quoting the great CBO.

Mr. VOLKMER. You can do a lot of things with accounting. Thank you very much, Mr. Chairman.

Mr. SMITH of Oregon. Would the gentleman yield?

Mr. ROSE. I am not trying to start a debate.

Mr. SMITH of Oregon. I want to help with some numbers, Mr. Chairman.

I think they refute that number simply because I have Montana, Wyoming, and Idaho here. And of the 10 forests in Idaho, 5 are below-cost and Wyoming, 4 are. In Idaho, 2 of 10; Oregon and Washington 2 of 30.

So the point is, the forests east of the Mississippi River are the forests that are below cost. But be careful when you say we ought to make them full cost because the Forest Service does many more things than just harvest timber, Mr. Chairman. It provides a lot of jobs. It provides a lot of resource for people.

So before we put all these in one bag, let's identify exactly what we mean.

Mr. ROSE. I totally agree with you, and I thank the gentleman for understanding that about the tobacco growers in my State. You are absolutely right about workers that get displaced, and I thank the gentleman.

Thank you, gentlemen very much.

The next panel will be Ms. Carole King, entertainer from Stanley, Idaho and member of the board of the Alliance for the Wild Rockies, North Hollywood, California, accompanied by Mr. Michael Bader, Alliance for the Wild Rockies, Missoula, Montana; Dr. John J. Craighead, professor emeritus of zoology and forestry, University of Montana, and founder, Wildlife-Wildlands Institute, Missoula, Montana; Dr. Lee Metzgar, chairman, department of wildlife biology, department of zoology, University of Montana; and Mr. Michael Garrity, University of Utah, Salt Lake City.

We are very happy to have all of you here. And our first witness will be Ms. Let-the-Earth-Move-Under-My-Feet King.

STATEMENT OF CAROLE KING, ENTERTAINER, AND BOARD MEMBER, ALLIANCE FOR THE WILD ROCKIES

Ms. KING. Thank you, Mr. Chairman. I would like to ask a question before my testimony. It was our understanding that Mr. Bader would be testifying on his own; is that correct?

Mr. ROSE. Yes, that is right.

Ms. KING. Thank you very much.

As you have stated, I am an entertainer and a resident of Idaho. I am a member of the board of the Alliance for the Wild Rockies, a nonprofit organization dedicated to the preservation of ecosystems in the northern Rockies. I have been involved in wilderness protection since the early 1980's. I have worked with environmentalists, industry, news media, Members of Congress, staff and people in general. And I want to begin by introducing two photos into the record.

Mr. ROSE. Without objection, they will be made a part of the file of this committee hearing.

Ms. KING. Thank you. These photos show better than words the contrast between wilderness and development, and I hope that all of the members of the subcommittees will avail themselves of the opportunity to see that contrast.

NREPA has 58 cosponsors so far across party lines who realize this bill is necessary for the health of the environment, species, and the economy. We hope to educate all of Congress eventually and, to that end, we very much appreciate this forum. We thank you and we thank Chairman Studds as well.

NREPA was drafted by scientists and biologists from the region. It is the first ecosystem bill ever. It represents the most state-of-the-art, comprehensive, scientific approach to public lands legislation, based on natural boundaries, as opposed to the old State-by-

State approach, where wilderness was designated as scattered islands in a sea of development.

Caribou, bears, and bull trout don't know when they have crossed a State line. They only know when their cover and food supply are gone. By then it is too late. Of the forests that once covered America, only 5 percent remain intact, but we can still save some cover and some food supply and some endangered species in the northern Rockies because it is the largest viable ecosystem in the lower 48.

NREPA will protect the wilderness required for the survival of all the native plant and animal species, any one of which could be vital to the survival of human beings, as the yew tree has been in the treatment of ovarian cancer.

Areas designated as wilderness by NREPA are among the most pristine in America and every area so designated meets the legal requirements for wilderness as prescribed by the Wilderness Act of 1964.

Biologically sound, NREPA is also economically sound. A study done by Dr. Thomas Power, chair of the economics department at the University of Montana, shows why NREPA is good for the economic health of the region. It shows how NREPA safeguards a multibillion dollar tourist industry preserving high quality jobs such as outfitters, guides, merchants, sellers of fishing, hunting, mountaineering, hiking and photography gear; saddlemakers, motel owners, craftspeople, and mom and pop grocery stores. These are jobs held by many of my neighbors in Idaho.

The Power report shows wilderness to be the best economic base for the region, ensuring a high quality of life and attracting new business, generating even more economic opportunity for local citizens. NREPA will create jobs in wildland recovery. It will also save taxpayers the over \$185 million a year now allocated for money-losing timber sale programs. The National Taxpayers Union agrees with this part of NREPA, and their letter is attached to my prepared statement.

Extractive industries have declined in the region because of factors other than wilderness, including automation, export of raw materials, overuse, and mismanagement. As people realize this, support for NREPA is growing. It is broad and diverse, from fishing and hunting coalitions to the Humane Society.

From the Sierra Club to the National Taxpayers Union. Former President Jimmy Carter has also written a letter of support which was introduced by Congresswoman Maloney.

As for the people in the region, I have a survey that the Forest Service conducted themselves and I don't know that they were particularly happy with the result, but it is a legitimate survey done by people of their choice that show that more than two-thirds of the people in the region want more wilderness and oppose any logging in roadless areas. Two-thirds, more than two-thirds.

NREPA clearly represents the national public interest and these people know it. For 13 years, the timber industry and others have run public lands policy. I have worked on this issue for many years and I believe NREPA is right for the Nation and for the region. Fifty-eight of your colleagues agree. NREPA must become law. The scientific and economic evidence is there.

If you can put politics aside and look at the merits, you can see that NREPA is the only way to ensure the biological and economical survival of the northern Rockies and all its species including Homo sapiens. This bill is a well thought-out, well-planned, well-prepared bill and any questions that you may have are answered within the bill. If they are not, they can be addressed.

Thank you very much.

[The prepared statement of Ms. King appears at the conclusion of the hearing.]

Mr. ROSE. I thank the gentlelady for her testimony.

Mr. Michael Bader, Alliance for the Wild Rockies, Missoula, Montana.

**STATEMENT OF MICHAEL BADER, EXECUTIVE DIRECTOR,
ALLIANCE FOR THE WILD ROCKIES**

Mr. BADER. Mr. Chairman, and honorable committee members, it is a privilege and an honor to present this testimony before the distinguished subcommittees. My name is Mike Bader, and I reside in Missoula, Montana.

I present this testimony on behalf of the Alliance for the Wild Rockies whom I serve as executive director. The alliance consists of more than 500 businesses and organizations and over 5,000 individuals.

"The first step in intelligent tinkering is to save all the parts." Aldo Leopold, the father of modern wildlife management, said this nearly 50 years ago. This legislation heralds a new era in public lands management. We strongly support the Northern Rockies Ecosystem Protection Act or NREPA. Representative Maloney and the 58 cosponsors deserve praise for their courage and dedication to this measure.

This bill charts a new course for public lands management and implements wilderness and other designations with consideration of their role as part of a larger ecological region. Importantly, it departs from the traditional State-by-State approach which fragments the landscape and is highly partisan and political.

NREPA enjoys both a strong scientific foundation and bipartisan support. Based upon the principles of conservation biology, NREPA outlines a process for halting the decline of ecosystems in the northern Rockies and begins the climb back to full ecosystem recovery. NREPA's designations act in concert to ensure ecosystem integrity and economic sustainability.

The northern Rockies are truly a national treasure. Millions visit each year enjoying the national forests and parks such as Yellowstone and Glacier. The northern Rockies are America's Serengeti with more than 300 vertebrate species. Most of the biological parts that Leopold spoke of remain. Yet the key indicators of ecosystem health and stability in the northern Rockies are on the threatened and endangered species lists with more headed that way.

I know from my days as a national park ranger in Yellowstone that the situation on the ground is extremely serious. Industrial giants have their way with our region because we are sparsely populated and, therefore, politically weak. Only by elevating this issue to national stature can we hope to protect the best of our rich American wilderness heritage.

We commend you for your leadership in beginning the process of debate and refinement and eventual passage with the signature of the President.

NREPA is sorely needed, for the management of this national treasure, held in the public trust, has been nothing short of criminally negligent. There has been extensive evidence of wrongdoing on the part of management agency officials, including the sworn testimony before Congress of former northern Rockies regional forester John Mumma, who testified he was bullied out of office because he wouldn't implement the logging levels contained in the Forest Service forest plans. These cut levels violate Federal environmental laws.

If you look at this satellite view of the Kootenai National Forest, you can see it should be reentitled a worked-over national forest. It is more logged over than the Amazon, which we have heard so much about.

To make matters worse, the reduction in timber cutting on the Northwest coast has resulted in pressure moving into the northern Rockies. Our region was set aside as a trading chip in the 1980's and we don't accept it. The same old billion board foot plans are haunting us and driving the process.

We expected changes in the way the Forest Service does business, but what we have observed has been the same old Forest Service and the same old business as usual. If you think the spotted owl crisis is bad, you haven't seen anything yet. In the northern Rockies, there are 18 species on the Federal list of threatened and endangered species, there are approximately 47 other species which are highly eligible for adding to the list.

The States of Montana, Idaho, and Wyoming list an additional 97 species critically imperiled and in Montana, alone, there are 397 plant species of special concern, meaning their existence is threatened. Yet more than 20 years after passage of the Endangered Species Act, not a single acre of critical habitat has been designated for any of these species—not a single acre.

A species-by-species approach is costly. The grizzly recovery plan carries a price tag of \$26 million, not counting the millions spent since 1975. The wolf plan estimates a minimum of \$6 million or more. The salmon plans will cost tens of millions as will bull trout, caribou—I think you get the picture.

However, the Congress now has an unprecedented opportunity to save hundreds of species and hundreds of millions of taxpayer dollars all at the same time. NREPA with its multispecies approach will not only prevent the extinction of numerous species, but does so in the most cost-effective manner.

With your permission, Mr. Chairman, I would like to enter into the record a paper on how NREPA bolsters the Endangered Species Act and reduces the work load now swamping Federal wildlife managers.

We have heard the Forest Service oppose this plan. They continue to support illegal and outdated plans. However, NREPA is national interest legislation that implements the will of the people. With your permission, Mr. Chairman, I would like to enter into the official record the official transcripts of a public hearing held in Missoula, Montana, where more than 95 percent of those attending

support the NREPA as well as a list of over 600 businesses and organizations in support of NREPA.

Despite the political mine field, there is ample reason to hope we can enact this legislation. A new American conservation ethic is emerging, based upon the best our rich conservation heritage has to offer. The Northern Rockies Ecosystem Protection Act encompasses a large area and a big vision. Indeed the late western writer Wallace Stegner described the West as the geography of hope. We believe he is right.

And I thank you again for the opportunity to present this testimony before the distinguished committees here today and appreciate your concern and attention to this important matter.

Thank you.

[The prepared statement of Mr. Bader appears at the conclusion of the hearing.]

Mr. ROSE. Dr. John Craighead, professor emeritus of zoology and forestry, University of Montana. I would ask that your prepared statement be made a part of the record. If it is possible to cut them down to hit the high points that is fine, but that is up to you.

Most of you have kept your statements very short, which we appreciate. But I have to leave here in 30 minutes, so just proceed accordingly.

**STATEMENT OF JOHN J. CRAIGHEAD, PROFESSOR EMERITUS,
ZOOLOGY AND FORESTRY, UNIVERSITY OF MONTANA, AND
FOUNDER, WILDLIFE-WILDLANDS INSTITUTE, ACCOM-
PANIED BY DEREK CRAIGHEAD**

Mr. J. CRAIGHEAD. Mr. Chairman, honorable committee members. I am John Craighead, retired ecologist. In the course of a long professional career, I was active in helping to enact the National Wilderness Act and to envision and help on the formulation of the National Wild and Scenic Rivers Act and the Endangered Species Act.

On several occasions, I testified before congressional committees on behalf of these landmarks of environmental legislation. It was testimony in support of good and visionary causes. Today, I am testifying in support of H.R. 2638, the Northern Rockies Ecosystem Protection Act, and I appreciate this opportunity. It is a privilege and an honor.

The Northern Rockies Ecosystem Protection Act is not a fly-by-night concept nor is it the irresponsible dream of way-out environmentalists as some critics would have us believe. It is, rather, the conservation wave of the future, a well-considered plan that has emerged from the Nation's conservation successes and failures of the past.

The NREPA is a concept that has a long evolutionary history. It was born when the first national park was created and the concept grew in scope and in attainability with the establishment of the National Wildlife Refuge System, the national forests, the National Wilderness System, the National Wild and Scenic River System, and the Endangered Species Preservation Act, all directed toward using, yet preserving through wise management wild America for the benefit of all Americans.

These historic steps and the recognition and preservation of natural resources emerged spontaneously and piecemeal at the grassroots level of our society. Each step invariably led to the next. Each made portions of our natural resource heritage more secure. Most, if not all, were initially opposed by the governing status quo but strongly advocated by a responsive public.

Ideally, these incremental steps to protect our natural resources might have led to a comprehensive holistic policy of sustainable resource preservation and management. For many reasons, they have not been fully successful in doing this.

It has taken time, experience, and acquired knowledge to recognize that the landscape of the mountain west is an entity that in the best interests of all Americans must be understood and managed as one unit. We must manage the sum of the parts, not just pieces by itself as we have done in the past.

The policies of the various Federal resource management agencies, although wise and visionary for their time, have proven inadequate to the task. They have been contradictory and divisive between and within agencies. Interagency cooperation has not been strong enough to rectify these differences. The result has been to fracture, rather than to unify the management of a common resource base, which is the foundation of our economic system.

In the northern Rockies, we have learned that to preserve the pristine elements of our environment and to guide and control our economic development, we must understand the biological, as well as the human components and social complexities of large ecosystems and, in turn, of entire bioregions of which they are a part.

The NREPA is the vehicle for accomplishing this. It will provide protection to large areas of unroaded de facto wilderness within the region and it will direct that these areas and established wilderness be managed in context with the larger portion of the region embracing human communities and extractive economies.

It will set the stage for holistic resource management. More than just the next step in the management of our natural resources, it represents the beginning of a new conservation era, one that will require new learning, new insight, and greater cooperation among Federal agencies and the public to attain common goals. It is a concept whose time has come.

Like all our major conservation movements, it will be, at first, an experiment, an ongoing experiment that can result in sustainable management of extractive resources while preserving the biodiversity of our wildlands ecosystems.

Mr. ROSE. Can I interrupt you there. I need to take about a 5-minute recess. Ms. Reno just called me. I don't think I am in trouble, but I have to call her right back. So she needs to talk to me right now.

You all just rest at ease for about 5 minutes and I will go in the back and I will be right back.

[Recess taken.]

Mr. ROSE. The subcommittees will resume their sitting.

Thank you for that. Dr. Craighead, your whole statement is going to be a part of the record. Yours, too, Dr. Metzgar and yours

Mr. Garrity. If you can skip around or maybe hit the high points. The whole thing is going to be in the record, but do as you please.

Mr. J. CRAIGHEAD. Thank you, sir.

The technical science to carry out this grand concept is at hand. Space-age technology and the computer information revolution have made it possible. I would like to enter into the record, as an attachment to my prepared statement, if I may, some papers indicating the progress that we have made in that direction.

It would be a grievous mistake to support or create temporary resource-related employment at the expense of the resource capital that future generations will require. An old era is phasing out amid cries of anguish and a new era is emerging amid visions of hope.

I want to commend Congresswoman Carolyn Maloney of New York for sponsoring this legislation, and I urge you to take the long view, the national view, by supporting Congressman Maloney and her cosponsors by enacting H.R. 2638 into law.

I thank you.

[The prepared statement of Mr. Craighead appears at the conclusion of the hearing.]

Mr. ROSE. Thank you, Dr. Craighead.

Dr. Lee Metzgar, chairman of the department of wildlife biology, department of zoology, University of Montana.

STATEMENT OF LEE H. METZGAR, PROFESSOR AND CHAIRMAN, DEPARTMENT OF WILDLIFE BIOLOGY, DEPARTMENT OF ZOOLOGY, UNIVERSITY OF MONTANA

Mr. METZGAR. Thank you, Chairman Rose. My name is Lee Metzgar, and I have been an ecologist and a wildlife biology professor at the University of Montana for over a quarter of a century and served as chairman of zoology and director of wildlife biology during that time. My area of specialty is population dynamics with special emphasis on large mammals and especially threatened and endangered species.

I wish to thank Chairman Rose and Chairman Studds for the opportunity to speak today on the Northern Rockies Ecosystem Protection Act. I think that the act is timely. It is desperately needed, and it is a visionary piece of legislation.

I would like to congratulate Congresswoman Maloney for introducing this legislation.

I understand that my written testimony will be entered into the written record, and so I would like to just make some abbreviated comments to try and emphasize what I think are some very critical points. And there are about five simple points that I wish to emphasize.

First, the northern Rockies ecosystem contains the only intact fauna and flora of the lower 48 States. It is absolutely unique. It is a small piece of our wildlands heritage that is valued by the American people no matter where they live, and that represents a piece of our heritage that we must preserve for future generations.

It may also be the world's best opportunity to preserve one small intact fragment of temperate forest worldwide, so this is an international resource, not just of national importance, but of worldwide importance.

My written testimony tries to provide key scientific references and documentation for each of the points, so I won't take time to do that now.

It is hard to imagine what has happened in this portion of the lower 48 States. When I went there three decades ago, it did not look like that satellite picture. That area was almost continuous unroaded forest. The speed and extent of these changes boggles the imagination and is comparable to the worst ecosystem devastation worldwide.

The fauna in this area is intact only because there were large blocks of wildlands that existed until very recently. In fact, evidence suggests convincingly that this landscape can no longer support its intact fauna. Development, especially logging, has gone so far in this area that the grizzly bear, the gray wolf, lynx, perhaps other animals are doomed to eventual extinction unless strong protection is extended in the very near future.

So my second point is that this treasure is in fact truly endangered, and I certainly don't share the optimism that was delivered in some of the earlier testimony today.

Third, I would like to argue that we know what this resource will require for its preservation. The science of conservation biology gives us some surprising results, and one of those results is that we will need more landscape preserve than we had previously thought.

Several lines of evidence outlined in my written testimony argue very convincingly that something on the order of 50,000 square miles must be cohesively managed. It doesn't all have to be preserved, but it must be managed in a series of blocks and corridors that can provide a landscape for the indefinite persistence of the large carnivores that still occupy this area.

That contrasts with some of the testimony that you heard earlier, and I think that the recent record of our land and management agencies does not give us reason for optimism. There is no plan that our agencies have generated that envisions a landscape within which these organisms can persist. Such a plan would demand no new roads and would propose habitat rehabilitation in key areas. That plan would involve a series of blocks and corridors that encompass about 50,000 square miles. In fact, that plan would look like NREPA.

Finally, I would like to argue that a plan to preserve these organisms is in fact realistic, that it can be done, that the landscape is there. With modest rehabilitation, we can create a landscape within which these organisms can persist. And I think that NREPA, the Northern Rockies Ecosystem Protection Act, realistically proposes a comprehensive and visionary plan for doing that.

So I would like to again congratulate Congresswoman Maloney for this visionary piece of legislation and I would be happy to answer questions.

Thank you.

[The prepared statement of Mr. Metzgar appears at the conclusion of the hearing.]

Mr. ROSE. I want to intervene now and let our colleague from California, Congressman Farr, make a statement.

OPENING STATEMENT OF HON. SAM FARR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. FARR. Thank you very much, Mr. Chairman, and I appreciate the opportunity to come here today as a member of this committee. I also serve on the Natural Resources Committee and heard the testimony in that, and I came here really to alert the committee as to a concern that I think is raised with the issues being developed in this legislation. And it is a concern that stems from two aspects. First is the economic.

As we look at this country's future and we see where we are going, we have to start beginning to manage our resources in the best economic fashion. And I think we are going to have to change a lot of the assumptions that we have made, which is that the best historic fashion was to mine the resources, to exploit them, and to not necessarily maintain renewability of them.

This country is moving from a manufacturing country to a service industry and, interesting enough, the economics of it. And the largest service industry in the country is in growth in tourism and is from people want to go watch wildlife. Watchable wildlife brings more revenue than hunttable wildlife.

What I was concerned about and was raised in the Natural Resources Committee is that the Department of Agriculture that ought to be working with the author on this bill on how to improve the bill has come out and opposed the legislation to the Department of Forestry and the same thing with the Department of the Interior.

What concerns me and I hope, Mr. Chairman, you, as chairman of this committee with jurisdiction on this issue, will really bring to task our Federal agencies that are not trying to help this committee and Members of this House when they approach an issue as large as this one where you are taking all public land and trying to develop a mechanism that will better manage the land, that will better protect the land, that will better enhance taxpayer access to the land rather than just allowing private resource development of that land.

And I think that it is really a tragedy that we have people in our agencies that come out in opposition to this bill without giving the author the ability to work out ways in which the bill could be implemented. And I hope as you go on with the testimony, that those people representing the Department of the Interior and the Department of Agriculture will be brought to task for not assisting with this legislation.

Thank you.

Mr. GOODLATTE. Mr. Chairman.

Mr. ROSE. Yes, sir.

Mr. GOODLATTE. I want to be very brief. I am going to have to leave. I would like to respond to the gentleman and also to some of the things that have been mentioned and insert for the record a couple of things if I might.

Mr. ROSE. All right.

Mr. GOODLATTE. First of all, in Ms. King's testimony, it was stated that the cost of this legislation, the saving is \$185 million, and we did talk and the chairman was interested in the below-cost timber sales issue. I would like to submit for the record the Forest

Service accounts of their receipts and their expenditures in this region.

I have the region 1 figures here and if we were allowed to keep the record open for 24 hours, I can give you the entire area here. This is most of the area. And of this portion, there were \$89 million in receipts and \$77 million in expenditures for a net revenue gain of over \$12 million for this area.

Second, Mr. Volkmer has asked me to submit for the record the numbers regarding the amount of public-owned forest land in the State of Montana, taking the currently used land which is about 3.4 million acres that is already in wilderness, the 1.7 million acres which this committee voted I believe last week to put into wilderness, coupled with about 8 million acres that are included in this bill. Of the 15 million acres of forest land in Montana, this would leave just 3 million available for timbering.

And I would say to the gentleman from California that I recognize the need for a great diversity in the use of our national forestlands, but to tie up all of our lands and make it unavailable for what is a substantial portion of our economy that is used by all of us does not take that into account.

And when we talk about below-cost timber sales, we forget about the added cost of nearly \$5,000 per house that it currently costs for construction because of increasing costs in the timber industry with reducing availability of public lands as a source of that.

Putting greater pressure on private lands where we also have to be concerned about biodiversity and the ecological impact of forestry. It has to be soundly managed, but it also has to be spread around the country including in this part of these five States. I thank your forbearance.

Mr. ROSE. Our next witness is Dr. Michael Garrity, University of Utah at Salt Lake.

**STATEMENT OF MICHAEL T. GARRITY, PROFESSOR,
UNIVERSITY OF UTAH**

Mr. GARRITY. Thank you, Mr. Chairman. I teach natural resource economics at the University of Utah. I would first like to note that 60 percent of the road cost is not included by the Forest Service in their expenditures.

Mr. ROSE. Would you stop and explain that a little.

Mr. GARRITY. They do not include the cost of the road base because they assume that the road will last indefinitely, so they amortize that over a period up to 2,000 years.

Mr. ROSE. I got it.

Mr. GARRITY. Thank you. From my research, I have found that H.R. 2638 is a jobs-creating bill. People live and work in the Northern Rockies because of its natural beauty.

The question of jobs versus the environment is a false one. These States would actually end up with more jobs if these lands were left in their natural state. NREPA will directly create 640 jobs by obliterating environmentally destructive roads. NREPA indirectly creates thousands of jobs by preserving a pristine environment which attracts and holds businesses.

This natural landscape is an economic base of the northern Rockies States. The current economic vitality is dependent on their high

quality natural environment, not their declining extractive industries. Further damage to these pristine areas will threaten the economic future of these areas. The number of timber jobs in these areas will continue to climb with technological advancement and the diminishing supply of trees.

Capital technology is the main cause of fall in timber-related employment. NREPA offers a better solution to put people to work. NREPA proposes approximately 1 million acres in the national wildlife recovery areas; 10,000 miles of roads will be closed and removed. And in addition, wildlife returned.

These activities will employ people. Obliterating 10,000 miles of road will create approximately 640 jobs for heavy equipment operators. These are good jobs which could be spread out well into the 21st century. Heavy equipment operators earn approximately \$22 an hour.

The employment created by this method will greatly ease the transition from a timber-based economy. The money to pay for this could come from ending timber subsidies. Last year, the Forest Service lost over \$185 million in logging sales on national forests covered by NREPA. As I pointed out, the Forest Service believes that these roads are an asset and actually they are a liability. Ninety percent of the increase in siltation from logging comes from these roads. The State of Montana has found that logging roads are the main cause of stream degradation.

In central Idaho, the erosion rate along roads was 750 times greater than in undisturbed areas. The siltation from these roads is killing trout and salmon.

Elk population directly declines with roads. The continued destruction of these lands will directly harm the elk hunting industry. Subsidized logging on these lands cause the U.S. Fish and Wildlife Service to spend more money to try to save the grizzly bear.

In summary, I believe NREPA will protect the environment, create jobs and save the taxpayers money.

Thank you.

[The prepared statement of Mr. Garrity appears at the conclusion of the hearing.]

Mr. ROSE. I want to thank all of you for your very excellent testimony. The fact of your being here and who the people are that have cosponsored this bill and who have written in letters to support it is very impressive. You have all done a very good job here.

Are there any points that any of you would like to emphasize before we close the record here? Anything that you think we may have.

Mr. GARRITY. With your permission, Mr. Chairman, I would like to enter in the record as an attachment to my prepared statement a report by the chairman of the University of Montana, Thomas Power, detailing the effects on the timber industry if this bill is passed.

Mr. ROSE. Without objection.

The gentleman from Virginia.

Mr. GOODLATTE. Thank you, Mr. Chairman.

I would like to thank all of the people for coming here, too, because we do share some of the objectives. We want to make sure

that the area is protected, but as you can tell, I very much disagree about the approach that you are taking.

One of the other comments, Ms. King, that you had in your testimony—and I don't have it right here in front of me—but if I can recall, you said that of the forest lands in this country, only 5 percent of the original forest lands are intact.

I take it you are referring to the original forest lands as opposed to current forest lands?

Ms. KING. Yes, sir; I am.

Mr. GOODLATTE. Because in point of fact, we have more forest lands in this country today than when Native Americans or European Americans settled this country because of the fact that we fight forest fires. I suspect that much of the land in this part of the country that we are talking about, including some of the land that in this proposed legislation, was grasslands at that time and that forests have been allowed to grow up, as I think they should, because they are a renewable resource.

In my district in Virginia in the Shenandoah Valley, Allegheny Mountains, and Blue Ridge Mountains, that area was a heavy mining area during the 19th century. Much of the Allegheny Mountains and Blue Ridge Mountains were decimated by cutting down trees to create the smelting furnaces for the iron industry well in the early part of this century.

Then the Mesabi iron ore range was discovered and iron mining went out of business, and I can take you to parts of my congressional district where towns existed with hundreds of people living in them where we now—you can except to be seeing a few rock foundations. You cannot tell these were thriving communities at one time, but because they are replaced by 80 and 100-foot tall trees, that have grown back up, have reclaimed the land.

And if we manage the land properly, as we haven't always done—certainly didn't do it in my area a century ago—we can have both preservation of ecosystems and the kind of resources that we need as an economy and not put pressure on private lands and not put pressure on lands in other countries when you still have this tremendous demand for forest products that we have.

Thank you, Mr. Chairman.

Mr. ROSE. Thank you all very much.

Mr. METZGAR. Mr. Chairman, if I neglected to do so, I would like to request that a letter from approximately 50 scientists in support of the Northern Rockies Ecosystem Protection Act also be entered into the record as an attachment to my prepared statement.

Mr. ROSE. Without objection, so ordered.

Mr. Bader.

Mr. BADER. If I may, Mr. Chairman, just very briefly, there was one point made repeatedly that I think needs to be clarified, and I need to state this, that under this legislation, over half of all the Federal lands in the area covered by this legislation will remain open to development. Timber harvest, mining, and other development and all of the private lands will remain open to development.

And I also heard some concerns about lumber and things like that, and I would like to just say that my father was a lumber salesman. Many of my family members are homebuilders, and they are member businesses of our alliance. They believe very strongly

that we need to protect these forests because these are not the forests that produce the kind of lumber that they require for building homes.

And they have always noted to me on many occasions that the price of lumber has absolutely nothing to do with whether or not people build homes but rather it is the interest rates that happen to be in effect at any given time. So I think that needs to be stated and, I appreciate you letting me add that in.

Mr. ROSE. Thank you all very much. This hearing is adjourned.
[Whereupon, at 12:15 p.m., the joint subcommittees were adjourned, to reconvene subject to the call of the respective Chairs.]
[Material submitted for inclusion in the record follows:]

CAROLYN B. MALONEY
14TH DISTRICT, NEW YORK
COMMITTEE ON BANKING, FINANCE
AND URBAN AFFAIRS

COMMITTEE ON
GOVERNMENT OPERATIONS

CONGRESSIONAL CAUCUS
ON WOMEN'S ISSUES
EXECUTIVE COMMITTEE

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**STATEMENT OF REPRESENTATIVE
CAROLYN B. MALONEY**

Joint Hearings

before

Subcommittee on Specialty Crops & Natural Resources
Subcommittee on the Environment and Natural Resources

Hearing on HR 2638
May 4, 1994

Thank you very much Chairman Rose and Chairman Studds. I am deeply appreciate the opportunity to speak hear today before at this joint hearing on HR 2638, the Northern Rockies Ecosystem Protection Act.

Mr. Chairman, when I was younger I had the great good fortune to visit many of our magnificent national forests in these Western states. Tragically, many of the beautiful forests and vistas that I saw aren't there for my children to see today.

That rapid depletion of forest disturbs me and it frightens me.

I fully recognize and appreciate that some of those forests had to be cut. America needs lumber and there are many jobs that depend upon extractive industries like timber and mining, though far fewer than in years past.

But it is woefully simplistic to think of wilderness protection as jobs versus trees.

We all recognize and agree that as far as logging on Federal lands goes, it only provides jobs because the Government, and the taxpayers, provide millions of dollars of subsidy to the timber industry.

In the forests covered in this legislation, according to the Congressional Budget Office, Federal expenditures exceed receipts by a 3 to 1 ratio; even when Federal road building is excluded, these forests are money losers.

Hundreds of millions of dollars in deficit spending might not, in and of itself, be a reason to protect these lands.

But it does cause me to reject the notion that Congressional debate on forest management is somehow Government interference with the independence of local residents.

It is after all, only on the sufferance of all American taxpayers that logging can continue in these particular Federal forests.

The question that the subsidy really raises is this: should all American taxpayers be subsidizing the destruction of these forests?

At what point do we say that the remaining untouched wilderness is too valuable to allow Japan to turn it into plywood?

Many scientists argue that further logging of these roadless lands at present rates will result in irreparable damage to our remaining populations of indigenous mammals, fish and birds; to our pristine rivers and streams; and to our unique old growth forests.

Mr. Chairman, and I tend to agree with that overwhelming independent scientific opinion.

I believe that our management policies should be guided by the need for preservation rather than by the small possibility that all of these scientists may be wrong.

It was for these underlying reasons that I introduced HR 2638.

The great American writer, Nathaniel Hawthorne, once said that "the biggest obstacle to being heroic is the doubt that you may instead prove yourself a fool."

While I certainly don't consider myself a heroine, I have to admit that I thought a lot about Hawthorne's comments as I found myself in the center of the firestorm of controversy that the introduction of NREPA ignited.

No doubt, some of the witnesses who will testify later -- and perhaps even some of the Committee members here today -- think me foolish or naive for introducing HR 2638.

But we are not here just to go along with the status-quo; sometimes it's important to challenge conventional wisdom, to be the one who says that emperor has no clothes -- or more appropriately, that pretty soon, our forests will have no trees.

Let me briefly discuss some of the things that NREPA would and wouldn't do if it were enacted.

First and foremost, the bill does not change the status of a single acre of privately or state-owned land.

It only deals with Federal land, which is held in trust by the Government for the benefit of all Americans.

NREPA would not designate lands that are currently open to timber and mining.

Now since the legislation was introduced last July, some of the exact boundaries of the roadless areas may have changed slightly.

And if and when this bill goes to mark-up, I am confident that appropriate adjustments will be made to reflect any reduction in the amount of roadless lands.

If enacted, this legislation will also not have a dramatic impact on the availability of lumber in the United States.

If you exclude western Washington and western Oregon, timber harvests from all Federal forests in the remaining Western states, accounted for less than 10% of total US timber production, even at the peak harvest rates of 1986.

That's according to the US Forest Service and the Congressional Research Service.

In fact, timber receipts from all the Federal forests in all of the states in the Rocky Mountain region, account for only 1/16 of total Federal timber revenues according to the Congressional Budget Office.

So since this bill only deals with a small percentage of the total number of Western forests, we are truly speaking about a negligible percentage of US timber harvest.

But though we are discussing only a small percentage of US timber production, I do not mean to diminish the scope of the legislation.

NREPA will designate over 16 million acres of new wilderness, and that is an awful lot of land.

But most of the land is not suitable for timber harvest or mining.

In fact, according to Dr. Thomas Power, the Chairman of the Department of Economics at the University of Montana, only 20% of the land designated in NREPA is suitable for timber harvest..

But let's talk about a few of the things that NREPA will do...

NREPA will protect the habitat of the only woodland caribou herd in the continental United States in the Selkirk Mountains.

The woodland caribou has been called by some scientists "the most endangered mammal in the continental US."

NREPA will protect the rivers and streams that are the last habitat for many of America's wild trout stocks.

NREPA will establish a program to help rehabilitate the Snake River, which has been called one of the most environmentally threatened rivers in America.

And most importantly, NREPA attempts to emphasize that all of these places, all of these forests are linked together in the most vital ways possible.

The best scientific minds in the nation, increasingly tell us that you can't realistically try and protect these unique lands and everything that lives within them, without thinking of the entire ecosystem.

| Now I know that that word provokes a lot of snickering and eye-rolling from folks who consider the word just to be more pseudo-intellectual, environmental mumbo-jumbo.

But stripping away the semantics, the concept makes good, common sense. In order to make wilderness protection work, you need to protect enough land to sustain the animals and plants that live within them.

And sometimes, those biological boundaries cross the political boundaries that we've established.

It would be wonderful if we could teach an eagle not to cross the Montana-Idaho border as it flies across Lolo Pass.

But that just isn't a possibility.

So this legislation seeks to accomplish the goal of protecting enough land to sustain the plant and animal populations, the pure streams and rivers, that currently exist in the 5 states.

Some critics question whether a Representative from New York City could possibly know enough to propose wilderness designations in Western states.

I guess, being a freshman and all, I hadn't learned that there are areas of Federal policy in which some Members of Congress weren't supposed to have an opinion.

Quite frankly, I categorically reject the idea that just because someone is from an Eastern state, they shouldn't have ideas about Federal policies that cost all American taxpayers hundreds of millions of dollars every year.

I am proud to follow in the tradition of New Yorkers like Theodore Roosevelt, who gave America its National Forest System.

Ironically, the Forest System was created, in part, because the timber industry at the time thought there would be no forests left if the Federal Government didn't step in to protect our timber supply.

And I am proud to follow in the tradition of Congressmen like Mo Udall, who lived as far away from the Alaska wilderness his legislation protected as I do from the public lands designated in HR 2638.

I know that this bill contains many controversial aspects.

I truly hope that by having this hearing, and the others scheduled for later this spring, we will be able to provide Members and the public with a wise and considered debate of the merits of these issues.

If nothing else, the American people should take comfort in the fact that we are debating how much land to protect, instead of whether to protect land at all.

As two supporters of NREPA who live in Manhattan (Manhattan, Montana that is) wrote:

"We feel that there is a little ray of hope for the incredible but dwindling wildlands we are so lucky to live near and love."

We all have a responsibility to sustain that hope.

Thank you.

STATEMENT OF
MARK REIMERS, DEPUTY CHIEF
FOREST SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

Before the
Subcommittee on Specialty Crops and Natural Resources
Committee on Agriculture
and
Subcommittee on Environment and Natural Resources
Committee on Merchant Marine and Fisheries
United States House of Representatives

Concerning H.R. 2638, the "Northern Rockies Ecosystem Protection Act of 1993"

May 4, 1994

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

I appreciate the opportunity to present the views of the Department of Agriculture concerning H.R. 2638, the "Northern Rockies Ecosystem Protection Act of 1993."

The Department of Agriculture recommends that H.R. 2638 not be enacted.

H.R. 2638 would designate additions to the National Wilderness Preservation System totaling approximately 11.7 million acres in the States of Idaho, Montana, Oregon, Washington, and Wyoming. The bill would also designate some 7 million acres as "Biological Connecting Corridors," some of which would also be managed as wilderness and some as special management areas with explicit management practices defined. The bill would also require a roadless area evaluation in the five states by a scientific panel.

H.R. 2638 would direct the Secretary of the Interior to study the feasibility of creating a Hells Canyon/Chief Joseph National Park and Preserve, creating a Flathead National Park and Preserve, and designating such areas as units of the National Park System.

H.R. 2638 would amend the Wild and Scenic Rivers Act to designate nearly 50 segments of specified rivers and creeks in Idaho, Montana, and Wyoming as components of the National Wild and Scenic Rivers System (NWSRS), and four segments of specified rivers and creeks in Montana and Wyoming for study as potential additions to the NWSRS. The bill would prohibit new road construction or reconstruction, bridges, dams, timber harvesting, mining, oil and gas leasing, or other developments within the one-half mile corridor along either side of rivers and streams under study.

H.R. 2638 would establish the National Wildland Restoration and Recovery System and authorize appropriations to establish the National Wildland Recovery Corps as a special unit of the U.S. Forest Service to carry out land recovery responsibilities.

Certain lands within the Lewis and Clark National Forest known as the Badger-Two Medicine Area would be designated as the Blackfeet Wilderness Area. In addition, the Congress would recognize that the Blackfeet Nation retains treaty rights in this area provided for in the 1896 treaty with the Federal Government. H.R. 2638 would require the Secretaries of

Interior and Agriculture to assure nonexclusive access for traditional cultural and religious purposes by native people to Wilderness areas, National Park and Preserve Study areas, Wildland Recovery areas, and Biological Corridors designated by this Act.

H.R. 2638 would require the Forest Service to enter into cooperative management agreements with the appropriate Indian tribes to assure protection of religious, burial, and gathering sites, and to work cooperatively on managing all uses in the protected areas that affect Indian lands and people.

Mr. Chairman, we believe this bill is well-intentioned and represents a great deal of hard work and concern for the magnificent northern Rockies region. We commend Representative Maloney for her efforts to broaden the debate over approaches to wilderness designation. H.R. 2638 is a very ambitious bill that represents a dramatic departure from previous approaches to wilderness and other special designations. While we recognize completely that the National Forests are indeed national resources, we also understand that their successful management relies upon strong support from the people who live near and often depend upon the resources of the forests for their livelihood.

Ultimately, wilderness designation is the prerogative of the Congress. Led by the Congressional delegation of affected states, the state-by-state approach to wilderness designation

used since the RARE studies has provided the important local and national perspective. The Forest Service's role has been to provide information concerning the resource tradeoffs and other management implications of potential wilderness designations. Information concerning existing interests such as mining claims, private land inholdings, special use permits and other activities and uses has been considered essential in previous wilderness deliberations, but has not been sought in this case. Using this and other information, the Congressional delegations have facilitated public discussion and forged consensus, both locally and nationally, concerning additions to the National Wilderness Preservation System.

Statewide wilderness bills have already been enacted in Wyoming, Oregon, and Washington. Reaching consensus has been most difficult where the stakes have been highest. Montana and Idaho, with the greatest share of the remaining roadless lands in the lower 48 states, have been particularly difficult. The Montana and Idaho delegations are currently working on statewide bills for their respective states. Using this deliberate process has resulted in a high quality National Wilderness Preservation System which enjoys the support of local and national interests.

As part of the forest planning process, the Forest Service makes recommendations for wilderness designations based on an evaluation of areas in light of what we believe the Wilderness Act describes. The Forest Service recommendations are

typically conservative and exclude many areas with non-conforming activities and structures, private inholdings, and other potential conflicts. In many cases, even though the Forest Service has not recommended statutory designation as wilderness, areas are still managed so as to maintain their roadless, primitive character. Many times there are compelling concerns that, from a management perspective, we feel can best be addressed with something less than statutory wilderness designation. There are significant acreages of land in this category as a result of forest planning efforts.

In the case of Montana, wilderness recommendations in forest plans total about 800,000 acres. An additional 2 million acres are to be managed under prescriptions which provide for no roads. After 16 years of work on the Montana wilderness issue by the Montana delegation, a bill with about 1.7 million acres of wilderness designations has been ordered reported by the Committees on Agriculture and Natural Resources. H.R. 2638 proposes about double that acreage for wilderness designations, plus an additional 2.4 million acres of wilderness associated with the biological connecting corridors for Montana. That is approximately 6 million acres of wilderness, more than three times the acreage that has emerged after 16 years of diligent effort to resolve a very difficult issue, and more than double the acreage identified in forest plans for roadless management. It is difficult to reconcile these widely divergent perspectives about how much wilderness is appropriate for Montana.

H.R. 2638 appears to bypass existing processes and laws. This bill would set aside the National Forest Management Act processes and outcomes which strive to strike a balance between preservation and development. This would mean that efforts to develop forest plans in consultation with the public would be set aside in favor of the approach taken by this bill.

Much like the National Forest Management Act, the Wild and Scenic Rivers Act provides a proven process for evaluating and adding rivers to the national system. That process includes public participation, which is essential to building support for river designations and implementing management plans. Local support for designated rivers is particularly crucial because river management relies so heavily upon the voluntary cooperation of numerous private land owners in the river corridor.

The rivers in this bill have all been found eligible for designation as wild and scenic rivers as a result of the forest planning process. As a result, the characteristics which make these rivers eligible are already protected until the suitability studies are completed. The Forest Service has been a major proponent of the Wild and Scenic Rivers system, managing 97 designated rivers, which is over half the rivers in the system.

We share some concerns of the proponents of this bill. These concerns and our management experience have lead us towards the ecosystem management approach being pursued by the Forest Service. The Chief of the Forest Service has stated that one of his primary goals is to quickly and effectively implement ecosystem management in the National Forests. We have initiated several broad scale assessments as a means to strengthen forest plans and have used this approach in developing the President's Forest Plan for the Pacific Northwest and for addressing concerns over salmon in west coast river systems, commonly referred to as PACFISH. We intend to use the information from these broad assessments to strengthen the forest planning process by incorporating ecosystem management findings when plans are revised.

We believe the concept of biological connecting corridors is best considered in the context of the land management planning process. Our experience in dealing with this concept in the spotted owl debate and the President's forest plan has illustrated the complexity of this question. With a team of the best scientists from many different federal agencies and universities focused on this problem, we learned many important things about "connectivity"--the spatial relationship of habitat conditions that sustain species across a region. One thing we learned was that old growth areas did not necessarily have to be physically joined in space, as many species are capable of moving between areas.

In dealing with biological connecting corridors, some questions we face include: (1) what corridor dimensions and conditions are necessary to serve the needs of a particular species?; (2) what kinds of treatments and activities are compatible with the purposes of any corridor?; (3) do corridors materially enhance the survivability of stressed wildlife populations? Without answers to these and many other questions, we believe designating corridors is premature. We are aware of no scientific basis for concluding that the corridors in this bill would achieve the stated purposes of maintaining or restoring biological diversity and ecosystem health.

The extensive measures mandated by this bill seem supportable only if one believes current processes cannot work. We do not share that belief. This is not to say that mistakes have not been made or that management problems don't exist. Both experience and new research continually change views on what is the "best" way to manage. Public perceptions and expectations also change. We should learn from experience, adapt our policies and management practices accordingly, and move on. We do not share the view that there is a crisis of the magnitude this bill would seem to presume.

Summary

In summary, we find this bill seems to disregard previous legislation of the Congress. As such, it would circumvent the processes set in motion by existing laws that address the complex issues of wilderness, ecosystem protection, biological

diversity and other management issues not easily resolved. This bill would ignore the processes of forest planning, wild and scenic river study and designation, and research and its application to management issues.

Mr. Chairman, this concludes my prepared statement and I would be pleased to answer the Subcommittee's questions concerning H.R. 2638.

STATEMENT OF JAMES W. STEWART, ASSISTANT DIRECTOR, PLANNING,
NATIONAL PARK SERVICE, DEPARTMENT OF THE INTERIOR, BEFORE THE
SUBCOMMITTEE ON SPECIALTY CROPS AND NATURAL RESOURCES OF THE
HOUSE COMMITTEE ON AGRICULTURE CONCERNING H.R. 2638, THE NORTHERN
ROCKIES ECOSYSTEM PROTECTION ACT OF 1993.

May 4, 1994

Mr. Chairman, thank you for the opportunity to present the Department of the Interior's views on H.R. 2638, The Northern Rockies Ecosystem Protection Act of 1993.

The Department of the Interior recommends that H.S. 2638 not be enacted. This is a broad act establishing a number of wilderness areas, biological connecting corridors, and wild and scenic rivers throughout the Northern Rockies region. It directs the Departments of Interior and Agriculture to conduct studies for additional national parks, preserves, and wild and scenic rivers. It also establishes a National Wildland Restoration and Recovery System to be administered by the United States Forest Service.

Because this bill would affect, primarily, lands administered by the United States Forest Service, we generally defer to the Department of Agriculture's views on this bill. We concur that it is an extremely ambitious bill and radically departs from previous approaches to wilderness and other special designations. It appears to circumvent the processes established by existing laws and regulations that address the complex issues of wilderness and wild and scenic river designations. These

processes provide important local perspectives and information concerning existing interests. While we recognize that these resources are indeed national resources, we also understand that their successful management relies upon strong support from the people who live near these areas and often depend the resources for their livelihood. We do not believe that the requisite groundwork for such a massive change in land use has been laid in order for the proposals contained in this bill to be successful.

We believe that this bill represents well-placed concern for the Northern Rockies bioregion. Portions of this bill would clearly benefit existing national parks, and the Department of the Interior advocates the integrated cultural and natural resource preservation, interagency cooperation, and sensitivity to American Indian treaty rights and cultural values espoused by the bill. However, the extensive measures advocated by this bill are supportable only if one believes that the current processes can not work.

The areas identified in Section 6 for study as possible national parks and preserve (Hells Canyon/Chief Joseph National Park and Preserve and Flathead National Park and Preserve) undoubtedly contain natural and cultural resource values of great significance. However, they are already administered for conservation purposes by the United States Forest Service to the National Park System.

Since the passage of the Wild and Scenic Rivers Act in 1968, the United States Forest Service has been responsible for conducting of rivers flowing across National Forest land. We support continuation of this practice since the United States Forest Service would be responsible for managing these rivers if designated. Therefore, we recommend that in Section 8 of this bill the Secretary of Agriculture be responsible for conducting the studies of the Smith and Middle Fork Judith Rivers and Rock Creek. The Yellowstone River study, which we support, should be a joint study by Interior and Agriculture.

This concludes my prepared statement, Mr. Chairman. I would be pleased to address the Subcommittee's questions concerning the Department of Interior's views.

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Testimony of Carole King before Ag&MerMar: 5/4/94: page 1

TESTIMONY OF CAROLE KING

At A Hearing on The Northern Rockies Ecosystem Protection Act (H.R. 2638)

May 4, 1994

Before a Joint Committee On
Agriculture and Merchant Marine and Fisheries

My name is Carole King. I'm an entertainer and a resident of Idaho. I'm a member of the Board of the Alliance for the Wild Rockies, a non-profit organization dedicated to the preservation of ecosystems in the Northern Rockies. I've been involved in wilderness protection since the early '80's, working with environmentalists, industry, news media, members of Congress, staff, and people in general, and after over 10 years I'm fairly knowledgeable.

I want to begin by introducing these two photos into the record.* They show, better than words, the contrast between wilderness and development.

NREPA has 58 cosponsors so far -- 58 members across party lines who realize this bill is necessary for the health of the environment, species, and the economy. We hope to educate all of Congress eventually. and to that end, we very much appreciate this forum. Thank you, Chairman Rose and Chairman Studds.

NREPA was drafted by scientists and biologists from the region. It is the first ecosystem bill ever. It represents a new approach to public lands legislation, based on natural boundaries, as opposed to the old state-by-state approach, where wilderness is designated as scattered islands in a sea of development. Caribou, bears and bull trout don't know when they've crossed a state line. They only know when their cover and food supply are gone. By then it's too late. Of the forests that once covered America, only 5% remain intact, but we can still save some cover and food supply and some endangered species in the Northern Rockies, the largest viable ecosystem in the lower 48. NREPA will protect the wilderness required for the survival of all the native plant and animal species, any one of which could be vital to the survival of human beings, as the yew tree has been in the treatment of ovarian cancer. Areas designated as wilderness by NREPA are among the most pristine in America, and every area so designated meets the legal requirements for wilderness as prescribed by the Wilderness Act of 1964.

Testimony of Carole King before Ag&MerMar: 5/4/94: page 2

Biologically sound, NREPA is also economically sound. A study done by Dr. Thomas Power, Chair of the Economics Department at the University of Montana, shows why NREPA is good for the economic health of the region. It shows how NREPA safeguards a multi-billion-dollar tourist industry, preserving high-quality jobs such as outfitters, guides, merchants, sellers of fishing, hunting, mountaineering, hiking and photography gear; saddlemakers, motel owners, craftspeople and mom and pop grocery stores -- jobs held by many of my neighbors in Idaho. The Power Report shows wilderness to be the best economic base for the region, ensuring a high quality of life and attracting new businesses, generating even more economic opportunity for local citizens. NREPA will create jobs in wildland recovery. It will also save taxpayers the over 185 million dollars a year now allocated for money-losing timber sale programs. The National Taxpayers' Union agrees, and I'd like to introduce their letter of support into the record.*

Extractive industries have declined in the region because of factors other than wilderness, including automation, export of raw materials, overuse and mismanagement. As people realize this, support for NREPA is growing. It's broad and diverse, from fishing and hunting coalitions to the Humane Society; from the Sierra Club* to the National Taxpayers Union. Former President Jimmy Carter has also written a letter of support.* As for people in the region, the Forest Service's own surveys show that more than 2/3 of the people in the region want MORE WILDERNESS and OPPOSE ANY LOGGING in roadless areas. NREPA clearly represents the national public interest and they know it.* I'd like to introduce the results of that survey into the record.

As for special interests, the timber industry and others have run public lands policy too long. I've worked on this issue for years and NREPA is right, for the nation and the region. 58 of your colleagues agree. NREPA must become law. The scientific and economic evidence is there. If you'll put politics aside and look at the merits, you'll see NREPA is the only way to ensure the biological and economic survival of the Northern Rockies and all its species, including *homo sapiens*. Thank you.

(Attachment follows:)



NATIONAL TAXPAYERS UNION

July 16, 1993

The Honorable Carolyn Maloney
U.S. House of Representatives
Washington, D.C. 20515

Dear Representative Maloney:

On behalf of the 250,000 members of the National Taxpayers Union, I appreciate your effort to reduce wasteful subsidies on public lands by introducing H.R. 2638, The Northern Rockies Ecosystem Protection Act.

The practice of below cost timber sales and logging road construction on national forest lands cost the American taxpayers over \$300 million each year. According to the Congressional Research Service, over the past ten years \$5.6 billion has been lost due to these direct and outdated subsidies.

The Northern Rockies Ecosystem Protection Act embodies a serious effort to prevent the losses to taxpayers that result from current management of the region. The 27 national forests cited in this legislation lost \$185 million dollars in 1992.

In these times of unprecedented deficits, no government expenditures should go unexamined. We support your effort to put an end to the wasteful subsidies on public lands.

Sincerely,

Jill Lancelot
Jill Lancelot, Director
Congressional Affairs

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**Before the House Agriculture and
Merchant Marine and Fisheries Committees**

**Subcommittee on Specialty Crops and Natural Resources and
the Subcommittee on Environment and Natural Resources**

**Testimony of Mike Bader on Behalf of the
Alliance for the Wild Rockies**

**Hearing on H.R. 2638,
the Northern Rockies Ecosystem Protection Act
May 4, 1994**

Mr. Chairmen and honorable committee members, it is a privilege and an honor to present this testimony before the distinguished committees assembled here today. My name is Mike Bader, and I reside in Missoula, Montana. I present this testimony on behalf of the Alliance for the Wild Rockies, whom I serve as executive director.

The Alliance for the Wild Rockies consists of more than 500 businesses and organizations, and over 5,000 individual members. The vast majority of these members are located within the Northern Rockies.

"The first step in intelligent tinkering is to save all the parts." These words were brought to us by Aldo Leopold, the father of modern wildlife management, nearly 50 years ago. The legislation before the committees today heralds a new era in public lands management. It implements the strategic vision and longterm thinking of conservation giants such as Leopold, Bob Marshall, and John Muir.

We offer our unqualified support for the Northern Rockies Ecosystem Protection Act, or NREPA for short. Rep. Maloney and the 58 co-sponsors of this legislation deserve praise for their courage and dedication to this measure.

This bill charts a new course for public lands management and is

the first to implement wilderness and other protective designations with consideration of their role as part of a larger ecological region, or bioregion. It does so effectively, and in a way that will save taxpayers hundreds of millions of dollars annually. It presents a plan that is biologically sound, and which will serve as the blueprint for protection of biodiversity and ecological and economic sustainability world-wide.

Importantly, this bill is a departure from the traditional state by state approach to wilderness designation which has fragmented the landscape and resulted in the wilderness designation debate becoming highly partisan and strictly political in nature without regard to the best available scientific and economic information. NREPA enjoys both a strong scientific foundation and a bi-partisan sponsorship.

Based upon the principles of conservation biology and compiled with the input of some of the world's leading scientists, NREPA outlines a process for halting the decline of ecosystems in the Northern Rockies, and begins the climb back to full ecosystem recovery. NREPA's designations of wilderness, wild and scenic rivers, biological connecting corridors, park and preserve study areas, and wildland recovery areas act in concert to ensure ecosystem integrity and economic sustainability. Importantly, the bill recognizes and protects the traditional uses of these lands by Native Americans for spiritual reasons and also protects cultural and historic sites. The bill will also result in the integration of land management policies among the different federal land management agencies and create a scientific panel to implement and monitor the progress of the legislation.

The Northern Rockies are truly a national treasure and resource. Millions of Americans come to visit this region each year, enjoying the National Forests and National Parks such as Yellowstone and Glacier. The Northern Rockies are America's Serengeti, with virtually the full complement of native species that were there at the time of the Lewis & Clark Expedition. More than 300 vertebrate species include free roaming populations of grizzly bear, gray wolf, woodland caribou, mountain lion, moose,

elk, mountain goat, lynx, bighorn sheep, wolverine, several species of anadromous salmon and steelhead, bull trout, westslope cutthroat trout, bald eagle, peregrine falcon, osprey, great gray owl, goshawk, golden eagle and trumpeter swan. Rare plants 3000-year old cedars and a host of others both known and unknown remain in what is the wildest region in the contiguous states. Most of the biological "parts" that Leopold spoke of remain in an incredible landscape diversity ranging from high cactus desert to temperate rain forest. Yet today, most of the key indicators of ecosystem health and stability in the Northern Rockies are on the threatened and endangered species lists with more headed that way. We are in danger of forgetting the lessons of Aldo Leopold.

I know from my days as a National Park Ranger in Yellowstone National Park that the situation on the ground in the Northern Rockies is extremely serious. Entire ecosystems teeter on the brink of ecological collapse due to out-of-date policies ordered by industrial giants who can have their way with our region because we are sparsely populated, and therefore politically weak. Only by elevating this issue to the national stature that it surely commands can we hope to protect the best of what is left of our rich American wilderness heritage. We commend you for your leadership in beginning the process of debate and refinement, and eventual passage of NREPA with the signature of the President.

NREPA is sorely needed, for the management of this national treasure, held in the public trust has been nothing short of criminally negligent. We do not say this lightly. There has been extensive evidence of wrongdoing on the part of management agency officials including the sworn testimony before Congress of former Northern Rockies Regional Forester John Mumma, who testified he was bullied out of office because he wouldn't implement the logging levels contained in the Forest Service Forest Plans, developed during the Reagan era. He said these cut levels violate federal environmental laws and are illegal. The 9th U.S. Circuit Court of Appeals recently confirmed this by declaring the Flathead National Forest Plan illegal and the logging levels "arbitrary and capricious."

If you look at the poster of the Kootenai National Forest which

shows a satellite photo of the forest, you can see that this poster should be titled, "the Kootenai, a worked-over national forest." This is more logged over than the central Amazon tropical forest we've heard so much about. If you look at these clearcuts with a magnifying glass, all the other thousands of clearcuts visible from space are just as bad. There are so many logging roads on this forest that the Forest Service can't even find them all, and now you why.

To make matters worse, the reduction in timber cutting levels on the Northwest Coast has resulted in pressure moving eastward into the Northern Rockies to make up for the shortfall making our region a sacrifice zone. Sawmills from western Oregon and Washington are now buying timber from National Forests in Idaho, Montana, and even Wyoming. Yet the timber industry can't get enough. Now they are cutting the cottonwoods along the rivers of eastern Montana and Wyoming.

Our region was set aside as a trading chip during the 1980's and we don't accept it. We didn't accept it then and we don't accept it now. The same old forest plans are still there and these billion board foot plans are haunting us and driving the process.

With the change in administrations, we, like everyone else, expected to see wholesale changes in the way that the Forest Service does business but what we have observed in the Northern Rockies has been the same old Forest Service and the same old business as usual chewing up our National Forests.

And if you think the spotted owl crisis is bad, you haven't seen anything yet. In the Northern Rockies there are approximately 18 species that are already on the federal list of threatened and endangered species. There are approximately 47 other species which are highly eligible for adding to the list. The states of Montana, Idaho, and Wyoming list an additional 97 species as critically imperiled and in Montana alone there are 397 plants species of special concern meaning their existence is threatened. Yet more than 20 years after the passage of the Endangered Species Act, not a single acre of critical habitat has been designated for any

of these species. Not a single acre.

With these mounting numbers, we have no recourse but to enter into ecosystem-wide protection and management. This will save literally hundreds of additional millions of dollars. To name just a few, the grizzly recovery plan carries a pricetag of \$26 million, not counting the millions spent since 1975. The wolf recovery plan estimates a minimum of \$6 million dollars, and possibly much more. The salmon recovery plan will cost tens of millions, as will bull trout, caribou . . .you get the picture. However, the Congress now has an unprecedented opportunity to save hundreds of species, and hundreds of millions of taxpayer dollars, all at the same time. NREPA will be extremely cost-effective, saving millions while instituting a management plan that requires the least amount of money. According to the U.S. Forest Service Forest Plans, wilderness is the cheapest per acre management program.

NREPA seeks to put an end to a deplorable situation that has gotten out of control in the Northern Rockies. We have heard from the U.S. Forest Service speaking out against this plan. Shockingly they continue to support illegal Forest Plans implemented during the Reagan administration. These plans continue to promote logging, roadbuilding and other development at the expense of what is certainly the most complete remaining fish and wildlife populations south of Canada. NREPA, with its multi-species approach will not only prevent the extinction of numerous species it does so in the most cost-effective manner. With your permission Mr. Chairmen, I would like to enter into the record a paper on how NREPA can bolster the Endangered Species Act, and reduce the workload now swamping federal wildlife managers.

NREPA is truly national interest legislation that implements the will of the people. A recent Forest Service opinion survey showed that more than 70% of the citizens of the region oppose any logging in roadless areas, want the National Forests managed more for wilderness and wildlife values, and want less roads. More than 600 businesses and organizations representing 5 million Americans endorse NREPA.

Despite the political minefield, there is ample reason for hope. We can enact this legislation and I believe we will. A new American Conservation Movement and ethic is emerging, based upon the best our rich conservation heritage has to offer. The Northern Rockies Ecosystem Protection Act encompasses a large area and a big vision. Indeed, the late Western writer Wallace Stegner described the West as the geography of hope. He's right.

Thank you.

(The following attachments are held in the committee files:)

THE PUBLIC LAND LAW REVIEW

ARTICLES

ENDANGERED SPECIES CONSERVATION:
WHAT SHOULD WE EXPECT OF FEDERAL AGENCIES?

Robert L. Fischman

THE MEANING OF "SPECIES"
UNDER THE ENDANGERED SPECIES ACT
Karl Gleaves, Michele Kuruc, and Patricia Montanio

DO SPECIES AND NATURE HAVE RIGHTS?
James L. Huffman

TAKING STOCK: THE ENDANGERED SPECIES ACT
IN THE EYE OF A GROWING STORM
Michael J. Bean

THE ENDANGERED SPECIES ACT:
ON A COLLISION COURSE WITH HUMAN NEEDS
Stuart Hardy

THE ENDANGERED SPECIES ACT AND FEDERAL
PROGRAMMATIC LAND AND RESOURCE MANAGEMENT:
CONSULTATION FACT OR FICTION
Peter Van Tuyn and Christine Everett

THE UNFORESEEABILITY FACTOR: FEDERAL LANDS,
MANAGING FOR UNCERTAINTY, AND THE
PRESERVATION OF BIOLOGICAL DIVERSITY
Jon D. Holt

THE NEED FOR AN ECOSYSTEM APPROACH
FOR ENDANGERED SPECIES PROTECTION
Mike Bader

ECONOMICS AND THE ENDANGERED SPECIES ACT
Karl Gleaves and Katharine Wellman

Volume 13



1992

ALLIANCE FOR THE WILD ROCKIES

PUBLIC HEARING - APRIL 12, 1994

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ALLIANCE FOR THE WILD ROCKIES

TRANSCRIPT OF PROCEEDINGS
ALLIANCE FOR THE WILD ROCKIES
NORTHERN ROCKIES ENDANGERED PROTECTION ACT, N.R. 2000

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Reported by Deborah Herroldith, RPR, 200 Southwest
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1-800-348-1000, OFFICIAL-PREVIEW Court Reporter for
the State of Montana, residing in Hamilton, Montana.

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Testimony of Dr. John J. Craighead
Before the Subcommittees on Agriculture, and Merchant Marine and Fisheries
Hearing on the Northern Rockies Ecosystem Protection Act (NREPA) HR2638
May 4, 1994

I am John Craighead, retired Ecologist, former Director of the University of Montana's Wildlife Research Unit, Professor Emeritus of Zoology and Forestry at the University of Montana, and founder of the Wildlife-Wildlands Institute, a private, not-for-profit research organization.

In the course of a long professional career, I was active in helping to enact the National Wilderness Act, and to envision and help on the formulation of the National Wild and Scenic Rivers Act and the Endangered Species Act. On several occasions, I testified before Congressional Committees on behalf of these landmarks of environmental legislation. It was testimony in support of good and visionary causes. Today, I am testifying in support of HR 2638, the Northern Rockies Ecosystem Protection Act. I appreciate this opportunity.

Members of Congress,

The Northern Rockies Ecosystem Protection Act, is not a fly-by night concept, nor is it the irresponsible dream of way-out environmentalists, as some critics would have you believe. It is, rather, the conservation wave of the future; a well-considered plan that has emerged from the nation's conservation successes and failures of the past.

The NREPA is a concept that has a long evolutionary history. It was born when the first National Park was created, and the concept grew in scope and attainability with the establishment of the National Wildlife Refuge system, the National Forests, the National Wilderness System, the National Wild and Scenic Rivers System, and the Endangered Species Preservation Act – all directed toward using, yet preserving through wise management, wild America for the benefit of all Americans. These historic steps in the recognition and preservation of natural resources emerged spontaneously and piece-meal at the grass-roots level of our society. Each step invariably led to the next. Each made portions of our natural resource heritage more secure. Most, if not all, were initially opposed by the governing status quo, but strongly advocated by a responsive public. Ideally, these incremental steps to protect our natural resources might have led to a comprehensive holistic policy of sustainable resource preservation and management. For many reasons, they have not been fully successful in doing this. It has taken time, experience, and acquired knowledge to recognize that the landscape of the mountain West is an entity that, in the best interest of all Americans, must be understood and managed as one unit. We must manage the sum of the parts, not just each piece by itself, as we have done in the past. The policies of the various federal resource management agencies, although wise and visionary for their time, have proven inadequate to the task. They have been contradictory and divisive within and between agencies. Interagency cooperation has not been strong enough to rectify these differences. The result has been to fracture, rather than to unify the management of a common resource base, which is the foundation of our economic system.

Here in the Northern Rockies, we have learned that to preserve the pristine elements of our environment, and to guide and control our economic development, we must understand the biological, as well as the human components and social complexities of large ecosystems and, in turn, of entire bioregions of which they are a part. The NREPA is the vehicle for accomplishing this. It will provide protection to large areas of unroaded de facto wilderness within the region, and it will direct that these areas and established wilderness be managed in context with the larger portion of the region embracing human communities and extractive economies. It will set the stage for holistic resource management. More than just the next step in the management of our natural resources, it represents the beginning of a new conservation era, one that will require new learning, new insight, and greater cooperation among federal agencies and the public to attain common goals. It is a concept whose time has come. Like all of our major conservation movements, it will be, at first, an experiment – an ongoing experiment that can result in sustainable management of extractive resources while preserving the biodiversity of our wilderness-wildland ecosystems.

The technical science to carry out this grand concept is at hand. Space-age technology and the computer information revolution have made it possible to accumulate the data necessary for managing the diverse resources and economies of large biogeographic regions more readily than a single National Forest was managed 15 years ago. The tools at hand are refined versions of the geographic information system (GIS), satellite radio-monitoring and tracking devices, and improved on-the-ground sampling techniques. The GIS is a tool that enables researchers and managers to build and collate information on a scale unimaginable just 15 years ago. Spatial data, such as maps, and tabular statistical information are electronically layered to generate a database that can be video-displayed and analyzed. For example, topographic, geologic, hydrologic, and vegetation data can be digitally layered over satellite multispectral imagery maps, and this vast array of terrain data then computer-collated and analyzed in a fraction of the time and with greater accuracy than was possible a few short years ago. To this basic terrain data can be added layers of information on land use, such as timber harvesting, road construction, recreational activities, animal censuses, and animal distribution. The technology is advancing more rapidly than its application. There is no question that we now have the technical capability of managing an entire bioregion, such as the Northern Rockies, as a single geographic unit. What we must now put into place are the resource management policies, goals, and actions that will derive from passage of the Northern Rockies Ecosystem Protection Act.

We in the Northern Rockies are blessed with an environment unequaled anywhere on earth. Our ecosystems with their biological diversity are still largely intact. Wilderness is the heart of this rocky mountain region and, in the future, it will be the heart of its economy. We should, at all costs, protect, and where still possible, enlarge these pristine areas. They are the ecologic benchmarks for future scientific enlightenment, and they are the resource reserves of our future.

The public lands of the Northern Rockies belong to all the American people, not to the citizens of any one state or any one social or economic group. The natural resources of these public lands fall into two categories of use: extractive and non-extractive. The extractive resources are timber, minerals, graze land, gas and oil. The non-extractive ones are pristine landscapes, the mosaic of plant and animal life, the water, the soil, and the basic ecological systems and biological processes that make the non-extractive, non-fragmented resource a living entity.

Holistically, this living entity is biodiversity, itself; and biodiversity thrives in interrelated ecosystems.

The Congress and the American people have, in the past, shown great vision and leadership in creating our National Parks, National Forests, Wildlife Refuges, and Wilderness Areas as a means for protecting and preserving the non-extractive values that translate into beauty, science, enjoyment, philosophy, lifestyle and, for some, religion. They are the heritage of all Americans. They are the property of the many, and not of the few, as is sometimes asserted by special interest groups.

On the other hand, the extractive resources of our public lands cannot be utilized and enjoyed equally by all citizens. They become the personal property of those few who have the power and resources to exploit them. Over time, these proprietary interests become accepted as vested in special interest groups such as loggers, ranchers, miners, etc.

We all recognize the need for both economic use and preservation on our public lands; the question is, "Where lies the balance?" Catering to special interests, with the resulting fragmentation of ecosystems, is especially unacceptable and unconscionable at a time in history when we clearly understand the necessity of preserving biodiversity and ecosystem structure. We need these large areas of near-pristine environment as reservoirs of undiscovered information, as ecological benchmarks, as keys to understanding both natural and man-made changes of the future, and as sustainable economic assets, when these uses do not threaten to degrade or destroy other values.

It would be a grievous mistake to support or to create temporary resource-related employment at the expense of the resource capital that future generations will require. An old era is phasing out amid cries of anguish, and a new era is emerging amid visions of hope. This is as much a natural economic and cultural process as plant succession is a biological one. We must understand its implications to society and to the nation and move on.

HR2638 provides our citizens with the opportunity to preserve the biodiversity of the Northern Rockies - the land Lewis and Clark explored less than 200 years ago - the land that now faces irreparable fragmentation, exploitation, and politicalization on a scale unheard of a mere half century ago.

What is needed at this moment in history are strong, dedicated, visionary representatives of the people who can and will transform the ecosystem management concept, as exemplified by the NREPA, into conservation law. Great congressmen of the past - Lee Metcalf, Frank Church, John Saylor - seized such moments and made conservation history. In doing so, they placed the long-term interest of the Nation above short-term partisan ones. They took risks which all great political leaders must take, but they took them armed with knowledge, vision, and commitment. They recognized the need for change and welcomed it. I commend Congresswoman Carolyn Maloney of New York for sponsoring this legislation. I urge you to take the long view, the national view, by supporting Congresswoman Carolyn Maloney and her co-sponsors by enacting HR2638 into law.

(The following attachments are held in the committee files:)

FILE COPY

*Attachment (1) To the record
Testimony of John Craighead*

USING SATELLITES TO EVALUATE ECOSYSTEMS AS GRIZZLY BEAR HABITAT

John J. Craighead, F. Lance Craighead and Derek J. Craighead

ABSTRACT: Remote sensing has proven to be a precise, highly quantitative tool for describing, mapping, and evaluating grizzly bear habitat on an ecosystem basis. Using the Landsat satellite's multispectral scanner system (MSS), habitat maps of a 4,592 km² (1,773 mi²) area were constructed and refined in Montana's Lincoln/Scapegoat and Bob Marshall wilderness areas. This technique was further tested in northwest Alaska over a 4,144 km² (1,600 mi²) area. Several satellite systems currently gather spectral data from the surface of the earth. These data, recorded on four to seven spectral bands, are used to describe the reflectance of vegetation and other surfaces. To relate digital image data to vegetation types, intensive ground-truthing (botanical sampling) is needed. A simple, replicable, relevé-type of sample plot is discussed, as well as techniques of interpreting these data and applying them to ecological studies. An agreed-upon, standardized method of describing vegetation with satellite mapping is needed as applications of the technique become widespread. Using standardized techniques, entire ecosystems can be mapped, quantified, and interpreted in terms of vegetation complexes, which are vegetation/habitat types with similar spectral reflectance values. These large units and their subunits can be described in terms of percent coverage and percent occurrence of plant species. Comparisons can then be made between ecosystems on all or some of these levels. This technique is presently the only practical method for obtaining precise quantitative data on an ecosystem basis and for making meaningful comparisons among ecosystems.

INTRODUCTION

In North America, designated wilderness areas are essential habitat for grizzly bears; they protect the last remaining pristine conditions of native flora and fauna. To preserve the ebb and flow of wilderness for social, aesthetic, and scientific purposes, it is necessary to learn more about the intricate interplay of fauna and flora. Compiling baseline data on the species and plant communities is the necessary first step, and using satellite imagery is the most promising method for obtaining this information over large areas of wilderness.

At this point in the development of satellite mapping techniques it would be wise to standardize the methods used in delineating vegetation complexes (vegetation/habitat types with similar

Paper presented at the Grizzly Bear Habitat Symposium, Missoula, MT, May 30 - May 2, 1985.

John J. Craighead is Director and F. Lance Craighead and Derek J. Craighead are biologists, Wildlife-Wildlands Institute, Missoula, MT.

spectral reflectance values) and in collecting sample plot data. The methodology developed in a study of grizzly bear habitat in the Lincoln/Scapegoat Wilderness Area in Montana (Craighead and others 1982) was further tested and refined in recent study which mapped the area surrounding the Squirrel River in northwestern Alaska where the intergradations between vegetation complexes are many cases, are subtle than those encountered in Montana. The techniques used to produce accurate habitat maps describing vegetation complexes in terms of plant species and plant communities, and the practical applications of this technology for the management of wildlife on an ecosystem basis, are the subject of this paper.

THE MAPPING SYSTEM

The Landsat satellites gather a continuous series of digital images of the earth's surface from polar orbit at altitude of about 900 km (560 mi) using scanning systems that record radiant energy over a wide spectrum of wavelengths. The multispectral scanning system (MSS) collects the digital image data that were used to define ecological vegetation complexes in wilderness areas in Montana and Alaska.

The basic spectral unit the picture element or "pixel," represents a rectangular area on the earth's surface of 1,530 m² (48,761 ft²) with the MSS imagery. Landsat thematic mapper (TM) data can define a smaller area, about one-fifth this size: 900 m² (9,688 ft²). A pixel defines the lower limit of resolution of the system; the reflectance over the entire pixel is averaged to give a single value. This is that in many instances the mapping system is useful for applications varying in scale from 0.09 ha (1/5 acre) to the area of an entire ecosystem. Using a digital image analyzer interactively, color-coded maps are constructed pixel by pixel from the multispectral data. When merged with topographic models (1:633,600 to 1:250,000) of the area, a digital map and data base are produced the final product of this mapping system.

The term "ecosystem," as used here, refers to large biogeographical area supporting common ecological vegetation classification. An ecosystem can be classified into a number of vegetation complexes (10 to 20) using spectral data gathered by the satellite scanner. These areas of similar spectral reflectance usually represent areas of similar vegetation. Vegetation sample plot data (or "ground-truth") from each of these complexes can then be used to describe each complex in terms of percent cover and frequency of occurrence of plant species and plant communities. Any of a number of intermediate habitat-type groupings, such as forest habitat types (FHT), ecological land

Attachment (2) to the second
Testimony of Dr. John Craighead

NATIONAL GEOGRAPHIC
Research
VOLUME FOUR
1988

OFFPRINT

John J. Craighead, F. Lance Craighead,
Derek J. Craighead, and Roland L. Redmond

**Mapping Arctic
Vegetation in Northwest
Alaska Using Landsat
MSS Imagery**

NATIONAL GEOGRAPHIC RESEARCH 4(4):496-527 (1988)

Attachment (3) *To the record
Testimony of Dr. John Craighead*

**New System Techniques
For Ecosystem Management
And an Application
To the Yellowstone Ecosystem**

John J. Craighead
Derek J. Craighead

Reprinted from **Western Wildlands**, Spring 1991

Craighead Wildlife-Wildlands Institute
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attachment & ^{for the} record

Testimony ^{Dr.} of John Craighead

Yellowstone in Transition

by John J. Craighead

Chapter 3 from

THE GREATER YELLOWSTONE ECOSYSTEM:
REDEFINING AMERICA'S WILDERNESS HERITAGE;
edited by Robert B. Keiter & Mark S. Boyce;
published by Yale University Press.

1991

TESTIMONY REGARDING
THE NORTHERN ROCKIES ECOSYSTEM PROTECTION ACT

PRESENTED TO:
THE U.S. HOUSE OF REPRESENTATIVES
AGRICULTURE SUBCOMMITTEE ON
SPECIALTY CROPS AND NATURAL RESOURCES
AND THE
MERCHANT MARINE AND FISHERIES SUBCOMMITTEE ON
ENVIRONMENT AND NATURAL RESOURCES

OFFERED BY:
DR. LEE H. METZGAR
PROFESSOR OF BIOLOGY
THE UNIVERSITY OF MONTANA
4 MAY, 1994

THE NORTHERN ROCKY MOUNTAIN BIOREGION CONTAINS A UNIQUE WILDLIFE RESOURCE OF INTERNATIONAL IMPORTANCE.

Within the lower 48 states, only one area, the Northern Rocky Mountains, still provides habitat for all of its native animals, including fishes, birds and even large predators like the grizzly bear, grey wolf, lynx, and fisher. This unique area represents our best, and possibly only, opportunity to preserve the complete biodiversity within any of the world's temperate forest ecosystems. The ecological and symbolic values of this ecosystem transcend regional and national boundaries, for our heritage includes these life forms and the wildlands upon which they depend. Our legacy to future generations of all people must include the preservation of at least one such intact system.

THE INTACT FAUNA OF THE NORTHERN ROCKY MOUNTAIN BIOREGION FACES GRAVE DANGERS.

Recent intrusions into previously isolated portions of the Northern Rockies challenge the ability of this landscape to support wildland-dependent species. These practices, primarily timber harvest but also residential and commercial development, fragment the habitats upon which our wide-ranging, low-density, sensitive species depend. Separation of habitat into shrinking islands inevitably leads to extinctions and constitutes the primary cause of our present biodiversity crises (Wilcox and Murphy, 1985).

A few short decades ago, unroaded wildlands connected the legislatively protected areas within the Northern Rockies. Large expanses of land with little human use and intrusion extended from Glacier National Park to the Yellowstone-Grand Teton National Park complex and from northern Idaho eastward onto the prairies of Montana. Indeed, that lack of human intrusion accounts for the presently-intact fauna of this bioregion.

The Northern Rockies landscape no longer possesses the wildland characteristics that preserved our great mammal predators. Networks of roads that both repel and endanger these sensitive species now cover much of the country between the blocks of land protected as national parks and designated wilderness areas.

Fragmentation may already have isolated Yellowstone National Park from the rest of the bioregion, and lack of corrective action will doom the Yellowstone grizzly bears to eventual extinction. Similarly, fragmentation endangers the fauna of the central Idaho wilderness complex which, by itself cannot sustain these species. Even Glacier National Park and nearby wilderness areas, if isolated by roads and development will fail to support sensitive species for future generations.

WHAT IS REQUIRED TO PRESERVE THE INTACT FAUNA OF THE NORTHERN ROCKY MOUNTAIN BIOREGION?

Two lines of evidence indicate that a landscape that supports the native plants and animals of the Northern Rockies will greatly exceed the size of any presently-protected area. This evidence, presented in abbreviated form below, relates to population size and to disturbance patterns within the landscape. It shows clearly that any effective plan to conserve large, sensitive mammals must protect habitat and coordinate management activities over tens of thousands of square miles (Schonewald-Cox, 1983; Noss, 1991a; Mann and Plummer, 1993).

We rarely know the number of individuals required to maintain a "minimum viable population" of a species. However, theoretical and empirical information suggests that a population with 500 or more breeding individuals will probably persist indefinitely (Shaffer, 1981). This number can provide considerable guidance. For example, since only about one fourth of the individuals in a grizzly bear population breed at any time (Allendorf, et al., 1991), managers should plan for a total population of about 2000 bears to maintain a minimum viable population. At an anticipated density of 4 bears per hundred square miles, a Northern Rockies population of 2000 grizzlies would occupy 50,000 square miles of habitat.

Some conservation biologists argue that the natural dynamics of the landscape should dictate the amount of area encompassed by our management plans. A "minimum dynamic area" suggested by Pickett and Thompson (1978) would include all stages of the natural disturbance regimes that characterize a region. Shugart and West (1981) suggest that such areas need to be fifty to one hundred times the size of the largest known disturbance within a region. In the Northern Rockies where fires constitute the dominant disturbance and can frequently exceed several hundred square miles, a minimum dynamic area would need to approach 50,000 square miles.

THE INTACT FAUNA OF THE NORTHERN ROCKY MOUNTAIN BIOREGION CAN BE PRESERVED.

Fortunately, The Northern Rocky Mountain Bioregion already includes nearly enough protected landscape to preserve its native plants and animals. The collective lands of five "ecosystems" (Greater Yellowstone, Greater Salmon-Selway, Northern Continental Divide, Cabinet-Yaak and Selkirk ecosystems) contain over 45,000 square miles of protected and/or unroaded habitat. Together, these lands represent the world's best opportunity to preserve a self-sustaining and intact remnant of temperate forest ecosystems.

Unfortunately, roading and development are fast invading the lands that lie between these protected blocks. Isolation of any of the three major components of this system will doom the large mammals within that block to eventual extinction. With the loss of any one of the blocks, the remaining area will no longer include a minimum dynamic area nor meet the landscape demands of minimum viable populations of large, wide-ranging mammals. Therefore, any plan to preserve self-sustaining populations of our large predators must contain wildlands corridors to link these Northern Rockies "ecosystems" together.

Creating effective corridors between the Northern Rockies "ecosystems" presents significant challenges. However, existing roadless lands, many under consideration for inclusion in the wilderness system, presently constitute much of the land along several potential corridors. These tracts, in combination with modestly rehabilitated public lands can form corridors that link all of the ecosystems of this bioregion and follow the guidelines that Noss (1991 a,b, and c) presents for effective linkages.

THE NORTHERN ROCKIES ECOSYSTEM PROTECTION ACT IS NEEDED TO PRESERVE THE UNIQUE WILDLIFE RESOURCES OF THE BIOREGION.

I am pleased to provide testimony in support of the Northern Rockies Ecosystem Protection Act. The authors of this act began with a holistic view of the biological requirements of the unique resources of the area. This act, based on the best available scientific information, presents the only coherent strategy to preserve wide-ranging, low-density, sensitive species.

The Northern Rockies Ecosystem Protection Act goes beyond the area-by-area and species-by-species approaches that clearly fail to preserve biodiversity or even individual species (Grumbine, 1992; Tear, et al., 1993). This visionary legislation will provide the comprehensive, bioregional planning and administration required to preserve this last remnant of temperate forest biodiversity.

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(The following attachment is held in the committee files:)

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*To the Congress of the United States
of America*

September 1, 1993

Ralph Allen, Ph.D., Fred Allendorf, Ph.D., Robert Ament,
David Augeri, M.S., Michael Bader, Timothy Bechtold, M.S.,
J. Frederick Bell, Ph.D., Thomas Birch, Ph.D., Bill Brudt, M.S.,
Stewart M. Brandborg, M.S., Ed Chaney, Derek J. Craighead, M.S.,
Frank C. Craighead, Jr., Ph.D., John J. Craighead, Ph.D.,
William Cunningham, M.S., Scott Edson, M.S., Al Engel, Ph.D.,
Ron Erickson, Ph.D., Al Espinosa, M.S., Paul Fritz,
Michael Frome, Ph.D., Evan J. Frost, M.S., Daniel Funsch, M.S.,
John Grove, Ed Grumbine, Ph.D., William Haskins, M.S.,
Daniel Henning, Ph.D., Glenn Hockett, John T. Hogg, Ph.D.,
Brian Horejsi, Ph.D., Maurice Hornocker, Ph.D., Allen Isaacson,
Sara Johnson, Ph.D., Charles Jonkel, Ph.D., Clifton R. Merritt,
Lee H. Metzgar, Ph.D., John A. Mitchell, Ph.D., Reed F. Nass, Ph.D.,
Mary O'Brien, Ph.D., Lance Olsen, M.S., Bert Pfeiffer, Ph.D.,
Robert R. Ream, Ph.D., Dexter Roberts, Ph.D., Paul Sieracki,
Jay Sumner, M.S., David Suzuki, Ph.D., Vicki Watson, Ph.D.

Testimony submitted before U.S. House Agriculture Subcommittee on Specialty Crops and Natural Resources and the House Merchant Marine and Fisheries Subcommittee on Environment and Natural Resources by Michael T. Garrity on May 4, 1994.

H.R. 2638, the Northern Rockies Ecosystem Protection Act (NREPA) is a jobs creating bill. People live and work in the Northern Rockies because of its natural beauty. The question of jobs versus the environment is a false one. These states would actually end up with more jobs if these lands were left in their natural state. NREPA will directly create 640 jobs by obliterating environmentally destructive roads. NREPA indirectly creates thousands of jobs by preserving a pristine environment which attracts and holds businesses. This natural landscape is the economic base of the Northern Rockies' states.

These states' current economic vitality is dependent on their high quality natural environment, not their declining extractive industries. Further damage to these pristine areas will threaten the economic future of these states.

Using Forest Service data, Professor Thomas Power, Chairman of the Economics Department at the University of Montana, estimates 1400 jobs would be lost if we preserve these roadless lands as wilderness. But the loss of 1400 jobs could be made up in less than three weeks with normal job growth (Power). The job loss is small because most of these roadless lands are not suited for timber production. The trees are too small and too few. Moreover, the number of timber jobs will continue to decline with technological advancement and the diminishing supply of trees. Capital intensive technology is the main cause of the fall in timber related employment, not lack of trees. Employment in the

wood products industry in Montana peaked in 1979 when 11,606 employees cut and milled 1 billion board feet of timber. In 1987, the timber industry harvested a record amount of timber, 1.376 billion board feet, but only 9,093 people were employed.

The data the Forest Service used in projecting job loss is from 1972. They estimate that for every one million board feet of timber cut 5 jobs will be created for one year. If current data is used only 1.5 to 2 jobs will be created for every million board feet logged. The number varies depending on how the wood is processed. Fewer jobs are created now than 20 years ago because of advances in technology. One person can cut in an hour what a two person crew could cut in a day twenty years ago. With today's technology only 560 timber industry jobs would be lost if we preserve these lands as wilderness. These 560 jobs are temporary jobs. Employment in the timber industry will continue to decline because of technological advancements.

Increasing timber harvest is not a guarantee that new timber jobs will result or even that existing ones will be maintained. In my econometric studies I found no correlation between timber harvest and the number of jobs in the wood products industry. Over the last 20 years when harvest levels were high the number of jobs was low. Employment levels were high when harvest was low. Total employment in the wood products industry peaked in the late 1970's when the amount of timber cut declined. The record timber harvest in Montana in 1987 employed 2500 fewer people than were employed in 1979. NREPA offers a better solution to put people to work.

NREPA proposes 995,924 acres as National Wildlife Recovery

areas. 10,000 miles of roads would be closed and restored and fish and wildlife returned. These activities would employ people. The Forest Service estimates it costs an average of \$10,000 to totally obliterate a mile of road in the Northern Rockies. Obliterating 10,000 miles of roads would create approximately 640 jobs for heavy equipment operators. And these are good jobs which could be spread out well into the 21st century. Heavy equipment operators earn approximately \$22 per hour. The employment created by this method will greatly ease the transition from a timber based economy. The money to pay for this could come from ending timber subsidies. Last year the Forest Service lost over \$185,000,000 on logging sales in national forest covered by NREPA. In the last ten years, the Forest Service has lost over \$5.4 billion on all of its lands. The justification for this corporate welfare is job creation. NREPA can produce more quality jobs and do so without destroying the west's major resource.

It is also argued that when we build roads we create something economically valuable but when we destroy roads we only make the mountains beautiful. In actuality, when we build roads we create a liability. Ninety per cent of the increase in siltation from logging comes from roads. The state of Montana has found that logging roads are the main cause of stream degretation. Roads contribute sedimentation to streams for an indefinite period. The road cut creates soil conditions which do not stabilize over time (Richard Hauer, PhD Flathead Lake Biological Station, personal interview). "Instream sedimentatation deposited in the stream bottom decreases the success rate of egg hatching and fry

development by impeding water flow through the gravels in which the eggs undergo early development" (Final Report, Montana Environmental Quality Council, December 1988).

A petition has been filed to list Bull trout as an endangered species. Logging harms these fish as well. Sediment originating from logging and logging roads can reduce embryo survival of bull trout and westslope cutthroat trout and decrease the available pools used for rearing bull trout. Bull trout are selective in the streams they choose. They only spawn in twenty eight streams of the hundreds available in the Flathead Lake water basin (Weaver, Fraley, 1990 p. 1). Trout fishing brings millions of dollars into Montana every year.

In central Idaho erosion rate along roads was 750 times greater than in undisturbed areas. The siltation fills spawning pools and has led to population declines in fish such as bull trout, salmon and westslope cutthroat trout (Noss). Salmon population supports 60,000 jobs and a billion dollar industry. The federal government is spending millions of dollars trying to save these fish. It would be more cost effective to deal with one of the sources of the problem which is logging.

The Forest Service closes many roads after logging in an area has ended. But the simple closing of these roads does not mean an end to their maintenance costs. The Forest Service spends between \$300 and \$500 per mile for minimum road maintenance. The Forest Service estimates that it is more cost efficient to obliterate a road if it is not going to be used for the next 20 years. By obliterating these roads up to \$5 million in normal annual

maintenance cost would be saved. The minimum maintenance does not take into account floods. Flood damage to roads runs in excess of a million dollars a decade per ranger district. This is due to maintenance costs alone. It does not take into account the tremendous environmental damage roads cause.

Elk population directly declines with road density. Two miles of roads per square mile leads to a 50 percent reduction in the elk population and six miles of roads per square mile eradicates virtually all elk in that area (Noss). The hunting of elk brings in millions of dollars into these states. The continued destruction of these lands will directly harm the hunting industry. Roads also increase poaching. The majority of poaching occurs from roads because they offer easy access into previously remote areas. Grizzly bears avoid roads by an average distance of one half mile (Noss). This leads to a tremendous reduction in their habitat.

To mitigate the damage from subsidized logging on grizzly bears federal and state governments spent \$9.8 million on grizzly bear recovery in 1990 and 1991 and \$978,000 on the recovery of the woodland caribou in 1990 and 1991. The subsidized logging of the Forest Service directly leads to more spending by the U.S. Fish and Wildlife Service.

But costs are more than just what the market measures. We can not replace animals when they become extinct. Professor John Craighead believes additional road construction will mean the end of the grizzly bear in the continental United States. Grizzly bears, elk, wolves, and caribou avoid roaded lands. These animals are important environmentally and economically. This does not

imply that human beings should not be considered first, but it does mean we must consider the other members of the community. We need to adopt policies which take the biotic community into account.

This is not a jobs versus the environment scenario. NREPA will protect the environment, create jobs, and save the taxpayers money. The trade-off is between permanently damaging the environment for the sake of a few hundred temporary jobs in the timber industry at the expense of destroying the Northern Rockies economic base, its natural landscape, and destroying thousands of permanent jobs.

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Henry

(The following attachment is held in the committee files:)

EXECUTIVE SUMMARY

**The Timber Employment Impact of the
Northern Rockies Ecosystem Protection Act
in
Idaho, Montana, Oregon, Washington, and Wyoming**

by

**Thomas Michael Power
Professor and Chairman
Economics Department
University of Montana
Missoula, Montana
59812**

September, 1992

OPENING STATEMENT

by

The Honorable Jay Dickey
Fourth District - Arkansas

**Joint Hearing of Agriculture Specialty Crops Subcommittee
and Merchant Marine and Fisheries Environment and Natural
Resources Subcommittee.**

Regarding

H.R. 2638, the Rocky Mountain Ecosystem Protection Act

May 4, 1994

Mr. Chairman, Members of both subcommittees, thank you for holding this hearing today on Representative Carolyn Maloney's legislation to designate as wilderness, over 16 million acres of public forest lands in five western states.

When this bill was the subject of a hearing in the Natural Resources National Parks and Public Lands Subcommittee on April 12, 1994, Representative Maloney was witness to a bipartisan onslaught of opposition to this massive lock up of federal lands in the west. As you know, the history here has been that we have dealt with wilderness designations on a state-by-state bases; that is usually controversial enough. Even individual state wilderness bills, whether Forest Service lands or Bureau of Land Management lands, take several years to get proper public input and delve into the details of the potential impacts on other natural resources -- water, endangered species, as well as considering the impacts on competing public land activities -- grazing, mining, timbering, recreation.

So, I see this bill as a rather inappropriate, poorly timed, broad sweep on a massive scale to promote essentially single-use federal land management in national forests of five western state, when it seems to me multiple-use is still the law of the land. While wilderness is certainly a part of that multiple-use management prescription, and I understand and do not necessarily disagree with the movement to science-based, ecosystem management, the fact is this bill needs some serious work before it can be taken seriously.

I look forward to reviewing the testimony.

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Greater Yellowstone Coalition

Testimony of Bart Koehler, Associate Program Director, regarding
HR 2638; The Northern Rockies Ecosystem Protection Act; before the
 House Natural Resources Subcommittee on Public Lands; April 12, 1994.

 Chairman Vento and members of the Subcommittee:

The Greater Yellowstone Coalition has pioneered the concepts of ecosystem management and protection for well over a decade. As you and many of the members of this Subcommittee and members of the full Natural Resources Committee know, we have drafted our own tri-state wildlands protection proposal for Greater Yellowstone, as a key component of our Campaign for Greater Yellowstone. It must be noted that our wilderness proposals are the result of many years of working with our member groups. We have attached a copy of our draft proposals and maps for your review & for this hearing record.

GYC supports efforts to protect and restore the long-term ecological integrity of the American Landscape. Closer to home, we strongly support the protection and restoration of the great wildland ecosystems in the Northern Rockies -- particularly within Greater Yellowstone.

GYC supports the goals of HR 2638 and we urge that you give this measure very serious consideration. For years GYC has said that we need more wilderness, more wildlife corridors and ecosystem linkages, more wild and scenic rivers, more and better wildlife refuge and management areas, and more emphasis on restoration areas and activities.

Chairman Vento, it must be noted that in many cases, the National Forest wilderness proposals in NREPA match up well with our proposals for Greater Yellowstone. In other cases, boundaries need to be more expansive, and additional areas need to be considered. Therefore, GYC strongly supports a series of strengthening amendments to HR 2638 which would: provide additional protections for more areas and acres of National Forest wildlands; more protection for BLM wildlands and National Park wildlands, more wild and scenic river designations, more wildlife corridors and ecosystem linkages, better protections for National Wildlife Refuges, more restoration areas plus other needed actions to ensure the protection of the natural integrity of Greater Yellowstone.

We will be happy to provide a detailed list of amendments and map changes at the Subcommittee's request. Today, prior to submitting this information we'd like to briefly point out some specific needed improvements to the National Forest proposals in HR 2638:

^IDAHO: Palisades(also in Wyoming) should be listed as 127,000 acres larger; Bear Creek should be 14,000 acres larger; Caribou should be 18,000 acres larger; Gannett Hills should be 4,000 acres larger.

^MONTANA: Snowcrest should be listed as 10,000 acres larger; the Gravelly Mountains should be roughly 40,000 acres larger; the Garfield Mountain-Red Conglomerate Peaks area (half in Mt./half in Idaho) should be 42,000 acres larger.

^WYOMING: Gros Ventre additions should be listed as 12,000 acres larger; Washakie additions should be listed as 52,000 acres larger; Commissary Ridge should be 6,000 acres larger; and, although there is no listing for this area, there are 50,000 acres which should be added to the existing Jedediah Smith Wilderness (at the very least, add roughly 20,000 acres).

*It must be noted that there are a number of BLM areas adjacent to proposed National Forest wilderness areas which should be added to this bill. Additionally, there are individual BLM areas which should be added to the bill(such as Raymond Mountain)which also need protection. We have not listed them in the above section, but would be happy to provide the details as the Subcommittee deems appropriate. (BLM areas are listed in our attachments, along with a rivers list, linkage map, etc., for your review.)

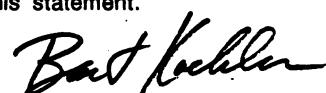
** Although not contained in the attached list, we support the designation of at least 2.3 million acres of roadless lands in Yellowstone & Grand Teton National Parks, and the J.D.Rockefeller Parkway as Wilderness.

***The detailed Draft Campaign For Greater Yellowstone is available upon request at any time.

Finally, we'd like to go on record in strong support of the amendments presented to you today by the Sierra Club and MWA, especially those which pertain directly to the Greater Yellowstone Ecosystem.

Thank you for the opportunity to present this statement.

Bart Koehler/Associate Program Director



(Attachments are held in the committee files.)

**The Employment Impact of the
Northern Rockies Ecosystem Protection Act
in Montana**

by

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March, 1992

Acknowledgements

This study of the impact of broad extension of wilderness protection to most remaining Forest Service roadless areas in Montana is part of a larger research project analyzing the role of extractive industry in the local and regional economies of the Rocky Mountain states.

This particular segment of that study was funded by a grant from the Voice of the Environment. The author wishes to acknowledge the cooperation of Region One of the U.S. Forest Service and the Alliance for the Wild Rockies in organizing the data for this study. Of course, the interpretation and use of that data is solely the responsibility of the author.

**The Employment Impact of the
Northern Rockies Ecosystem Protection Act
in Montana**

1. Introduction and Conclusions

A. Introduction

The primary public concern about protecting unroaded wildlands by prohibiting or restricting commodity production on those lands is the impact on local employment. The widely held view is that protecting the natural character of these landscapes will take desperately needed natural resources from industries that dominate the local economies. As a result, the local economies and local residents will be impoverished. Whatever may be the environmental advantages of such wildland protection, the local economic impacts are assumed to be negative and large. This presents local residents as well as the nation as a whole with a "tragic choice": They can preserve unique and valuable ecosystems only at the cost of seriously damaging the economic well-being of those living adjacent to these natural areas.

This paper will show that not only is this not the case but the opposite is more likely to be true: Protected landscapes are a crucial part of the economic base of Montana and these high quality natural environments have provided ongoing vitality in Montana's local economies despite the ongoing decline in employment in extractive industries. Further damage to that landscape through extension of roaded logging into Montana's remaining wildlands threatens Montana's economic future while providing very few current jobs.

**B. Timber-Related Job Losses Associated with
Preserving Roadless Areas**

If wilderness protection were to be extended to virtually all of the remaining U.S. Forest Service (FS) roadless areas in Montana, about 200 jobs would be directly lost due to reduced timber harvests compared to the timber harvest now planned by the FS. When the indirect and induced effects of these direct job losses are taken into account, the total employment impact would be the loss of 600 jobs. This 600 jobs represents less than two-tenths of one percent of the approximately 380,000 jobs in Montana's Forest Service counties. The Montana economy has been generating about 6000 additional jobs each year. The 600 jobs at risk would be replaced in about five weeks at this rate of economic

expansion. That is, the economic cost of preserving over five million acres more of wildlands than the FS or Montana's political leaders support is the loss of the number of jobs typically created in any five week period.

The table below shows the distribution of these jobs across the various National Forest economic areas in Montana:

Table 1

Total Employment Impact of Protecting Almost All FS Roadless Areas Compared to Current FS Forest Plans
- Direct, Indirect, and Induced

National Forest Area	Change in Employment	Change in Area Employment	Weeks of Avg Job Growth to Replace
Lolo	-249	0.50%	12 weeks
Bitterroot	- 33	0.06%	1 week
Gallatin	- 82	0.23%	5 weeks
Helena	- 20	0.02%	1 week
Beaverhead	- 85	1.16%	48 weeks
Custer	0	0	0 weeks
Deerlodge	- 21	0.08%	42 weeks
Kootenai	- 31	0.26%	20 weeks
Lewis & Clark	- 29	0.03%	1 week
Flathead	- 68	0.08%	2 weeks
Total Montana	-619	0.16%	5 weeks

Source: See Appendix A. "Almost All" refers to the areas that would be protected by the Northern Rockies Ecosystem Protection Act (NREPA).

These employment impacts were estimated by using Forest Service data on the potential suitable timber acreage in current roadless areas. The impact of removing these acres from the suitable timber base on the annual allowable sale quantity and the long term sustained timber yield of the forest was analyzed. Forest Service estimates of the total direct, indirect, and induced employment associated with each million board feet of timber harvested were used even though they are based upon 1970s lumber mill and timber harvest technologies. These employment multipliers were then used to convert the reduced timber harvest to reduced employment.

C. Assumptions Made and Their Impact on the Job Loss Estimates

Several assumptions were made in developing these timber-related job loss estimates, some reduced the projected job losses associated with protecting the remaining roadless areas, others increased the estimate. These assumptions will be discussed in more detail below and in Appendix A. Here we simply seek to highlight them.

First, the Forest Service estimates of the timber harvest potential of the roadless areas assumes that restrictions will not be placed upon below cost timber sales in the future. Given that both the Forest Service itself and the U.S. Congress are both considering regulations to restrict timber management in areas where costs exceed the value of the timber and that the Executive Branch has already made one attempt to restrict such below cost management, ignoring the below cost issue in roadless areas exaggerates the actual timber that will be allowed to be harvested from these areas. Any realistic estimate of timber harvests from these roadless areas must consider the likely impact of restrictions on below cost timber management activity. The analysis in this report considers the impact of assuming that 30 percent of the planned harvests in the roadless areas will be so below cost that they will not be allowed to proceed.

Second, the Forest Service estimated employment impacts associated with timber harvests using an input-output model tied to a 1970's data base. Since that time, especially during the 1980s, the employment associated with timber harvest has changed as a result of both labor saving investments in mills and harvesting equipment and as a result of the shift in products produced from more labor intensive to less labor intensive products. As a result, employment per million board feet harvested has declined significantly. In this report, no adjustment was made to correct for over-estimate of employment impacts.

Third, the Forest Service estimates of the potential timber harvests associated with roadless areas looked at all roadless areas. The Northern Rockies Ecosystem Protection Act although it seeks to protect most of these roadless areas, does not seek protection for areas that have already been heavily impacted by human activity. In addition, some of the inventoried roadless areas have already been developed. Thus the impact of NREPA would be modestly (about 20 percent) lower than the Forest Service estimates would indicate.

Finally, it appears as though the Forest Service estimates of the timber potential of these roadless areas was estimated by assuming that the roadless areas classified as suitable for timber had the same potential timber productivity as the average of all

other acres in the suitable timber base. Given the location of these roadless areas, this is unlikely. Their productivity is likely to be lower and the costs associated with managing them for timber are likely to be higher. As a result, the contribution these roadless areas can make to the annual sale quantity is likely to be smaller than the Forest Service assumes.

The details of the estimation procedure used in this paper can be found in Appendix A of this report. The broader context in which these estimates were carried out and in which they should be interpreted is discussed in the following sections.

2. An Overview: Why the Timber-Related Employment Impact of Wildland Protection Is So Small

Given the heated and divisive debate in Montana over the wildlands protection issue, this small economic impact associated with maximum wildland protection may seem startling. After all, the "disastrous" economic impact associated with wilderness "locking up" natural resources that were needed by Montana's "basic" industries has been the primary reason many Montanan's have opposed additional wildland protection. But when the potential economic impact of wildland protection is looked at in quantitative detail, it becomes clear almost immediately that the timber-related impact can be expected to be small.

A. Most Roadless Acres Are Not Suitable for Timber Management

In its planning process the Forest Service has classified its land base according to its capacity to managed for commercial timber production. Land is classified as either "suitable" for timber management or "unsuitable". This is not entirely an economic judgement. In order to meet its timber production targets, the Forest Service's planning model drew into the suitable timber base as many acres as were necessary regardless of whether the commodity values produced justified the costs of management. As a result, much "below cost" acreage was classified as "suitable" for timber management.

Even with such basic economic constraints on timber management artificially removed, the Forest Service still found that only 17.8 percent of the roadless area acreage "suitable" for timber management. That is, 82.2 percent of the roadless areas are not part of the Forest Service timber base, even given the Forest Service's loose definition of timber "suitability". (University of Montana, 1990). The Table below summarizes these results by National Forest.

What these timber suitability figures indicate is that over 80 percent of these roadless areas could be managed as wilderness without affected the Forest Service's planned annual sale quantity

(ASQ). Only 20 percent of the roadless acres have commercial timber potential. Thus the debate over economic impact has to center not on all 6.3 million acres of roadless wildland but only on the 1.1 million acres on which the Forest Service sees commercial timber potential. This scales back the potential economic impact to a fifth of the size it might otherwise be seen to have. In that context, the small employment impact should not be startling at all.

Table 2
Percent of Roadless Acreage **NOT** Suitable for Timber Management

Lolo	70%
Bitterroot	78%
Gallatin	84%
Helena	85%
Beaverhead	88%
Custer	77%
Deerlodge	79%
Kootenai	78%
Lewis & Clark	87%
Flathead	80%
Montana NFs	82%

Source: University of Montana GIS Laboratory, 1990

B. Roadless Areas Will Be Costly to Manage for Timber

The remaining roadless areas in Montana are still roadless because of their isolated locations, difficult topography, and low productivity. In the past it simply did not pay to road and log these areas. They are difficult to get at, involve steep, environmentally sensitive landscapes, are high, cold and sometimes dry sites with low valued timber species. To gain access to these sites, expensive road systems will have to be put in place, special harvesting techniques will have to be used, and the initial standing inventory will have to be removed before higher valued species can be planted. Then there will be a wait of up to a century or more for the more valuable crop to be harvested, if regeneration is successful. This assures high costs and low commodity values for many decades into the future.

This is not speculation. Most of Montana's National Forests already face timber management costs in excess of the timber commodity values harvested (Forest Watch, 1991, p. S1). Even those National Forests such as the Kootenai which overall do make money on their timber management activities face losses on many of their roadless area activities (Kootenai NF, Upper Yaak DEIS; Power, 1989 Critique).

In the planning process, the FS FORPLAN model estimated the highest valued pattern of meeting the timber harvest targets by focusing harvests on the lands with lowest management costs and highest valued timber potential. This automatically focused timber harvests on already roaded lands. But several Montana NFs overrode the planning model recommendations and planned major additional (and costly) timber management activities in the roadless areas. For instance, on the Gallatin NF FORPLAN recommended about 3.2 mmbf/yr. from roadless areas but that NF instead plans to seek 14 mmbf/yr. from those areas. The Beaverhead NF and Kootenai NF also plan roadless area timber harvests that are 2.5 and 2.8 times what FORPLAN indicated was economic in roadless areas. (Region One, USFS, 1990)

If these Montana Forests expand their timber management into these roadless areas, the losses associated with timber management activities will rise. It is not clear that Congress or, even, the Forest Service will allow that to happen. The Forest Service has drafted regulations that would limit its below cost timber management activities in the future. Congress is considering more stringent restrictions. The executive branch has made one attempt already at banning below cost timber sale activity on selective national forests including the Beaverhead in Montana.

When restriction are finally placed on below cost timber management activities, among the first areas to be dropped from the timber base will be the roadless areas now included. That means that as a practical matter the timber harvests projected by the Forest Service from these roadless areas will not in fact be available even if the area is given no wilderness protection. In that situation, that potential uneconomic timber harvest cannot be looked upon as a cost associated with wilderness protection. It will not be wilderness protection that is restricting timber harvest on these lands but economic rationality and good business sense.

C. The Forest Service Can Redirect Its Management Activities to Minimize the Economic Impact of Wildland Protection

There is not just one way to manage a land base for timber production. One can manage in an "extensive" way, seeking to bring all acres under a minimal level of management. Alternatively, one could focus management effort more on those parts of the land base that appear to be most productive for timber. Given the limited

budget the Forest Service has to work with, it cannot do everything that might add to its realized timber harvests. It has to make choices as to what to commit the limited budget it has.

This is relevant to estimating the economic impact of preserving the remaining roadless wildlands because the Forest Service can react to restrictions on timber harvest in roadless areas by focusing its timber management activities more intensely upon the already roaded timber land base. Such a shift in management emphasis from the more "extensive" effort including roadless areas to a more "intensive" focusing exclusively upon already roaded areas will produce an increase in productivity from the already roaded land base that at least partially offsets the lost potential production from the roadless areas. The point is that there are ways that the Forest Service can boost timber production other than entering roadless areas.

This is not speculation. As part of the forest planning process the Forest Service was required to analyze an "all wilderness" alternative in which all of the inventoried roadless acres were allocated to wilderness management. Under that alternative, the Forest Service was then free to reallocate its timber management efforts back to the already roaded areas. When this was done, on several Montana National Forests, the annual sale quantity was actually increased over the harvest in the forest plan actually adopted. This was the case on the Beaverhead, Custer, and Flathead during the first decade of the plan. Over the long term, it was also the case on the Kootenai. On the Lolo, Gallatin, and Lewis & Clark National Forests, wilderness designation had only minor impacts on the long term sustained timber yield of the forests. See Tables 2 and 3 in Appendix A. Given the possibility of shifting timber management efforts from a more extensive approach to a more intensive approach and the fact that the vast majority of roadless areas are not suitable for timber management, the impact of wildland preservation on timber production need not be significant.

This is not to say that such a shift towards more intensive timber management activities would not have problems of its own. Such efforts would have their own environmental problems and may also be uneconomic in the sense of yielding commodity values that are less than the costs. The point is only that when an acre of roadless "suitable" timber land is taken out of the timber base, it does not mean that that potential timber harvest is lost. Reallocation of management effort can partly or wholly offset any reduction in timber potential.

D. Timber Harvest is a Declining Source of Employment

Over the two decades changes have taken place in both the technology used to harvest and mill trees and in the products derived from that harvest. Both of these have had an impact on the employment associated with Forest Service timber harvests.

During the 1980s lumber mills were retooled to focus upon both smaller diameter trees and a more limited set of milled products, primarily studs. In the process these mills were automated in a way that significantly reduced the labor needed. In addition, at least to a limited extent, investments in new timber harvest techniques also reduced the labor needed.

On the product side, relative shifts away from the more labor intensive plywood production towards production of dimensioned lumber and plywood sheathing substitutes (e.g. particle board) has also had an impact on the labor used per million board feet harvested.

Between 1979 and 1989, timber harvest from Montana's forests rose from 11 million board feet to almost 14 million board feet but total employment in the forest products industry in Montana fell from 11,600 to 9,200. The direct employment per million board feet harvested fell from almost 10.7 to 7.3, a 32 percent decline (Garrity, 1991, p. 6). If one statistically analyzes the relationship between forest products employment and timber harvest over the twenty year period 1969 to 1989, one finds no statistically significant relationship (Power, 1992, p. 6, fn. 6). That is, increasing or decreasing the level of harvest does not have a reliable impact on employment in the forest products industry.¹

The decline in the direct employment associated with timber harvests has not reached its limit. One can expect ongoing technological change that will continue to chip away at the employment associated with timber harvests (Keegan and Polzin,

¹One of the reasons for this is the diversification of the forest products industry in Montana during this time period to make use of the waste products of lumber and plywood mills. The expansion of the Missoula paper board mill and the establishment of particle board facilities boosted the employment that could be obtained from the same level of harvest. This adds "noise" to the analysis of the employment-harvest relationship and may keep a relationship from being observed. In addition, given the increasing role of recycled cardboard and the much wider market from which chips are drawn for the pulp and particle board mills, it is not clear what the employment link is to local harvest levels.

1987; Anderson and Olson, 1991, p. 54-55). Because of this, it would be appropriate to adjust downward the Forest Service's estimate of the job impact of reduced harvests. The aggregate employment-lumber consumption ratio fell by 32 percent during the 1980s. In addition, that aggregate data shows reliable statistical relationship at all between employment and timber harvest. The longer run employment impact, of course, would have to be adjusted even further downward.

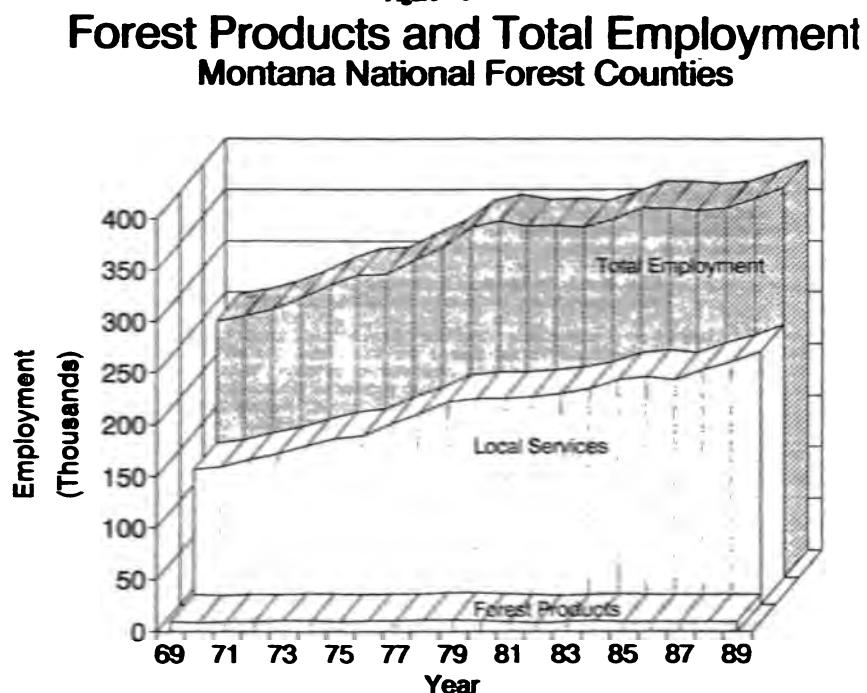
In this paper, the FS's 1970s employment-consumption ratio was not adjusted downward in making the employment impact estimates. This partially reflects an attempt to be conservative. It also reflects the fact that these FS estimates approximate those estimated by the Bureau of Business and Economic Research at the University of Montana. See Appendix Table 5.

E. The Wood Products Industry Is Not a Major Source of Employment or Economic Vitality in Western Montana

One reason the timber-related employment impact associate with wildland protection is so small is that the timber industry is a relatively small part of the overall economy. This contrast with the widely held view that the wood products industry is a dominant element of Western Montana's economic base, being responsible for half or more of all economic activity. Whatever case could have been made in support of this type of assertion in the past, it is not now supportable. Wood products has provided a steadily declining share of employment in the counties surrounding the national forests. It now represents a very tiny percentage (2 percent) of total employment in the "national forest" counties*. See Figure 1. While total employment has expanded almost 60 percent over the last two decades, employment in forest products has not increased at all although it has fluctuated widely. See Figure 2. Clearly it is not the forest products industry that is the source of vitality in the Western Montana economy. This has especially been true in the early 1980s when employment in forest products fell by a third but employment elsewhere in the economy remained relatively stable. During the 1980s the forest products industry has been a declining source of employment, yet the rest of

*For purposes of this paper, the Forest Service's definition of the economic region influenced by its activities has been adopted. In general, this includes all of the counties in which the national forest is located as well as adjacent counties that contain the local trade center. This includes most of the western two-thirds of Montana and 41 of Montana's 56 counties.

Figure 1



the economy has managed to expand modestly.³

This same pattern can be seen if the individual Montana National Forest economic areas are examined. The traditional extractive industry economic base (forestry, mining, manufacturing, and agriculture) has declined as a source of employment by ten to twenty-five percent while the rest of the economy has expanded 60 to 120 percent. Figure 3 shows this for the aggregate of all of Montana's National Forest counties. Appendix B provides the figures for the individual national forests.

Given that the forest products industries in particular and the entire extractive industrial base as a whole are a small and shrinking source of employment that have not been a source of vitality but of decline in the Western Montana economy, it should not be surprising that a modest reduction in timber harvest associated with landscape protection does not have a major employment impact on the overall economy. We are talking about a small change in employment in a relatively small and declining sector of the economy. That leads to the "doubly small" impact discussed above.

3. Off-Setting Employment Gains: Landscape-Related Economic Activity

A. People Care Where They Live: Protecting the Attractiveness of an Area

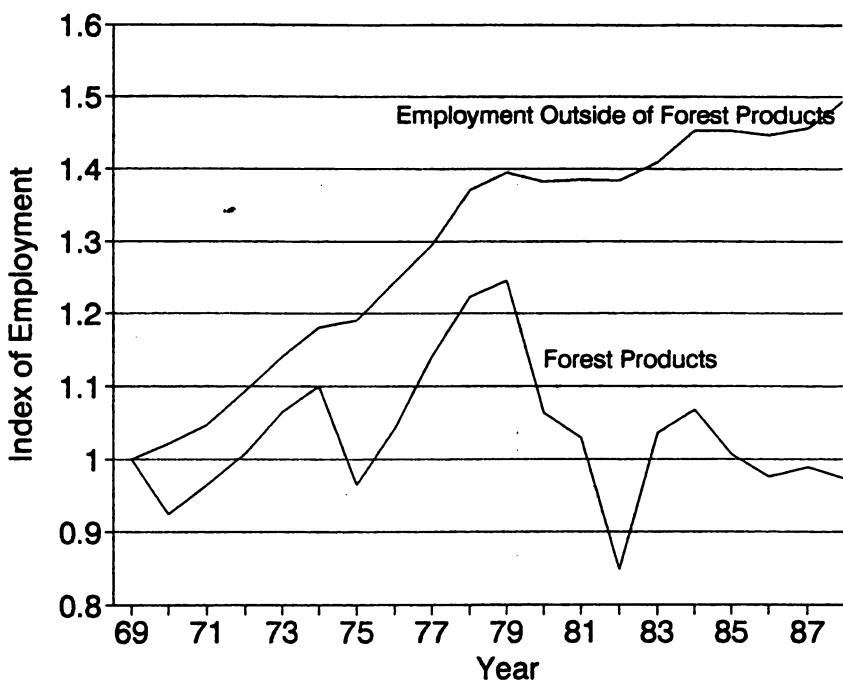
i. Protecting What Is Unique about Montana

Wildland protection is usually viewed as a moral or aesthetic act that has significant (but possibly justifiable) anti-economic impacts. This would be correct only if people did not really care where they lived or about the quality of the natural environment that surrounded them. Some popular economic opinions support this assumption: People are assumed to move to where jobs are found regardless of the character or quality of that location. Economic theory and data, however, contradict this view. People do care very much about the quality of the living environment. Because of that, areas that wish to see stable and vital communities and economies have to pay attention to the character and quality of their natural and social environments. Polluted, ravaged landscapes deter economic activity as do dysfunctional social environments which threaten peoples' lives and property.

³It is possible, if incomes in forest products were rising while employment was declining, that forest products could still have a stimulating impact on the rest of the economy. But this was not the case. Forest products has also been a declining source of income during the 1980s.

Figure 2

Forest Products and Other Employment Montana National Forest Counties



Montana is one of the more isolated geographic locations in the nation, separated from economic centers to the east by a thousand miles of rural Great Plains and to the west by several mountain ranges. Its traditional extractive industries are in decline as sources of income and employment. In this situation, Montana's economic future is going to be importantly tied to how attractive people find Montana to be as a place to live, work, and do business. In this Montana will be competing with other areas of the country. Those things about Montana that make it uniquely attractive will be important in determining how well Montana does in this competition. Montana's wildlands and the scenic splendor, wildlife and recreation they support are clearly central to this. Montana still has expansive intact ecosystems with all of their original wildlife: grizzly bear, timber wolf, caribou, etc. Nothing like this can be found anywhere else in the lower forty-eight states. These natural landscapes will play an important role in Montana's future if we choose to protect them. Alternatively, if we scar and fragment that natural landscape for a few more jobs in declining industries, we sacrifice our economic present and future in an attempt to hang on to a small part of our economic past.

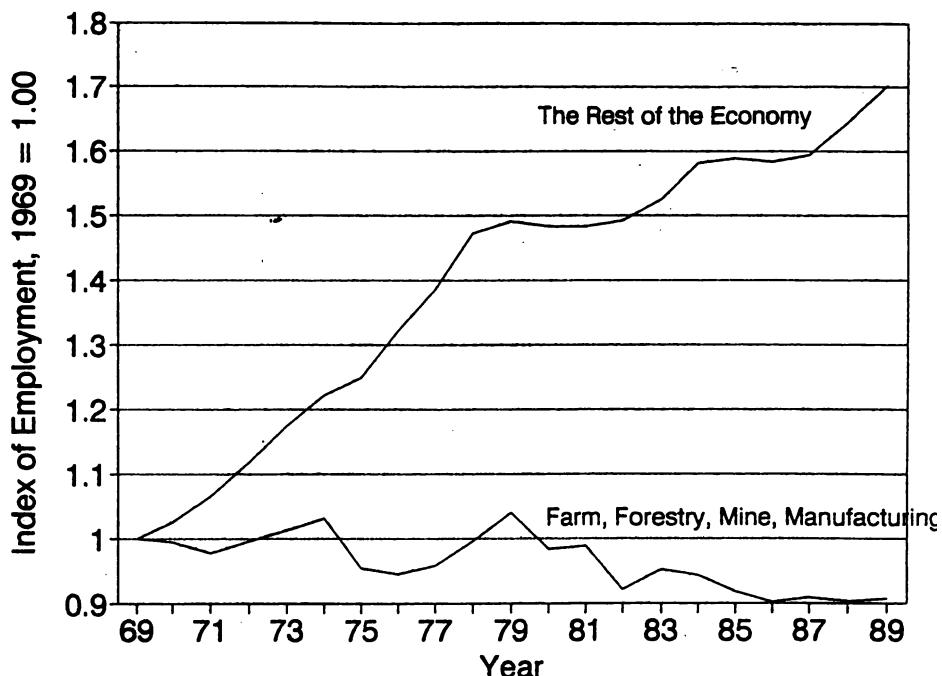
ii. The Importance of the Quality of the Living Environment Nation-Wide

As America's developing regional economies move away from reliance upon primary production (agriculture, mining, and forestry) and manufacturing and become much more diversified, the population's preferences for living environments has come to play a more and more important role in the determination of where both population and business are located.

Consider the massive shift of population from center cities to suburbs after the Second World War. This initially involved a move away from jobs and shopping opportunities and a significant increase in commuting costs. Why were these costs incurred? One major motivation was obviously to obtain a superior living environment: a less congested, more socially homogeneous neighborhood with "park-like" qualities (large lawns, single story dwellings, low population density, rural qualities, etc.). Or consider the more recent shift in population from the "frost" or "rust" belt of northern industrial states to the "sun belt" of southern states. This was a move from high wage industrialized areas to low wage relatively undeveloped areas. Here, too, qualities of the living environment played an important role in this migration of millions of people. In fact the term "amenities" was coined by a California economist in the early 1950s to explain the influx of population into the desert southwest despite the absence of any "economic base" to draw them there (Ullmann, 1955). Clearly climatic conditions were one element of the environment that played a role in the relocation of the population. But like

Figure 3

Goods Production v. Rest of the Economy Employment in Mont. Nat.Forest Counties



the move to the suburbs, much of this move was an attempt to escape from the building legacy of environmental and social problems in the older, industrialized regions.

The impact of environmental amenities on the location of population and economic activity is not limited to these historical patterns. It continues. During the 1980s, most of the rural United States suffered a severe economic depression as agriculture, forestry, and mining all faltered. But a substantial set of nonmetropolitan counties escaped this serious downturn and actually prospered. The United States Department of Agriculture has labeled these counties "high amenity" counties because they are characterized by environmental qualities that have served as magnets that drew both population, employment, and economic activity despite economic decline elsewhere in the nation and rural areas. These attractive amenities included lakes, mountains, rivers, moderate climates, seashores, protected natural areas, cultural institutions (college towns), etc. (Deavers, 1989; Beale and Fuguitt, 1990)

A more directly relevant example of this phenomenon is the impact of wilderness protection on adjacent communities. It is often claimed that protecting wildlands, because it limits extraction of natural resources, impoverishes communities by locking away valuable resources. But a survey of all of the counties adjacent to classified federal wilderness in the United States shows that for the last thirty years, these counties have had population growth rates that are two to three times the national average and the average for all nonmetropolitan counties (Rudzitis and Johansen, 1989 and 1991). Whatever wilderness protection has done, it has not choked off economic growth. One explanation for this growth which is supported by survey work is that people seek out high quality living environments and wilderness protection serves as an indicator of areas where a permanent commitment has been made to preserve the natural environment. This draws people and economic activity.

The pattern of growth in Montana matches the results found in the analysis of wilderness counties nation-wide. Many counties adjacent to wilderness have seen ongoing economic expansion despite the depression that enveloped most of the Montana economy since the late 1970s. Ravalli and Gallatin counties, for instance, have been among the fastest growing counties in the state despite significant reductions in timber harvest off of National Forest land and the ongoing shrinkage in their wood products activity. The Flathead Valley is also a growth center in the state. There too timber harvests off of National Forest land have declined while employment and income in the wood products industry has remained stagnant. The growth in these counties cannot be explained without commenting upon the spectacular natural landscape and recreation opportunities provided by it. Some other Western Montana "wilderness" counties

have shown less growth than these primarily because of the collapse of the extractive economic base (e.g. mining and smelting in the Butte-Anaconda area). But even in these areas, the rest of the economy has shown surprising resilience and stability. The ability of the landscape to attract and hold population, even during depression-like conditions, has played an important role here.

Note that the emphasis here is on the importance of high quality living environments to current or potential residents, not tourists. High quality living environments stimulate economic development simply by making a place attractive for people to live, work, and do business. Tourism, at best, is a sidelight to this phenomenon.

One can expect this trend of people moving to where the qualities of the social and natural environments are attractive to continue. Environmental quality appears to be a "luxury" good. As incomes rise, more and more people choose to make sacrifices to obtain access to these qualities. Rising levels of education also seem to increase peoples' environmental sensibilities and lead them to consider environmental quality more closely when they make location decisions. Improvements in transportation and communication allow people to move some distance from large urban centers without facing economic or cultural isolation. Finally, as public and private retirement programs which were put in place 40 to 50 years ago begin supporting people who have contributed to those programs over their entire working lives, more and more of our population will enjoy "footloose" incomes which travel with them where ever they choose to live. This allows them to exercise locational choices free of economic constraints which, in turn, allows environmental preferences to play a larger role. All of these trends taken together suggest that environmental "amenities" will play an increasingly important role in the location of population and economic activity in the years to come. (Power, 1988)

The fundamental point here is that protecting the natural landscape in Montana is not an anti-economic act that merely eliminates jobs in Montana's traditional economic base. Protecting the natural landscape in Montana also creates economic activity and jobs. In the present and the future, this latter positive impact on economic activity from wildland protection almost certainly outweighs the relatively small potential timber-related job loss. The trade-off here is between permanently damaging the wild landscapes that make Montana unique in return for a few hundred jobs which could have been replaced by a few weeks of job growth tied to peoples' pursuit of that special Montana landscape. Again, we permanently sacrifice our economic present and future in order to temporarily hang on to a small part of our economic past.

B. The Role of Recreation and Tourism

The most obvious landscape-related economic activities are outdoor recreation and tourism. Commercially supported non-resident travel activities make up a growing part of the "basic" economic activities that bring income into the state. While almost all other basic economic activities were in decline in the 80's, non-resident travel continued to grow. Most non-business visitors to the state are attracted by various attributes of the landscape or wildlife supported by that landscape: scenery, fishing, hunting, camping, backpacking, etc. (Moisey and Yuan, 1991).

But these high quality recreational resources do not have economic significance only when out-of-state visitors make use of them. That recreation in Montana's world-class natural areas is also a direct benefit to local residents that boosts their "total" income in the same way that free access to any valuable resources boosts anyone's total income. This is part of what attracts and holds residents and their economic activity here. In addition, the availability of satisfying recreational opportunities here in Montana keeps income from leaking as quickly out of the state as it otherwise would. If Montana were largely an unpleasant or boring place to be, residents would regularly travel out-of-state to spend their income in the pursuit of the qualities that make their lives interesting and varied. Montana's high quality recreational opportunities substantially reduce this type of income leakage.

It is important to note that more employment associated with Montana's National Forests is associated with recreation and wildlife than with timber harvest. Recreation-wildlife forest-related employment was about 3,650 while timber-related employment was about 2,950. See Table 3. On eight of Montana's National Forests recreation/wildlife employment significantly exceeds timber-related employment. On over half of the Montana National Forests two-thirds or more of forest-related employment is related to wildlife and recreation. For instance, on the Gallatin National Forest, recreation-wildlife employment exceeds timber employment by a ten-to-one margin. That is, the primary economic connection between the National Forest and the local community is more often than not through recreation and wildlife, not timber harvest. In that situation, managing the forest to protect the local economy means managing the forest to protect wildlife and recreation.

It is important to note that the recreation and tourism being discussed here does not have to be "industrial-scale" tourism built around mega-resorts that dominate the communities in which they are located. Most of that recreation and tourism is dispersed over a wide, largely rural area. As "adventure-tourism" and "eco-tourism" continue to grow in importance, this dispersed type of economic activity built around small local businesses will continue to support our small towns and rural areas.

Table 3
National Forest-Related Employment in Montana

National Forest	Timber Related Employment	Timber as % of Total Forest-Related Employment	Sum of Wildlife and Recreation Employment	Rec & Wildlf as % of Tot Forest-Rel Employment
Lolo	407	43%	528	56%
Bitterroot	159	51%	147	48%
Gallatin	82	8%	880	90%
Helena	41	25%	110	66%
Beaverhead	71	17%	274	67%
Custer	12	3%	332	80%
Deerlodge	72	12%	405	68%
Kootenai	1037	70%	432	29%
Lewis&Clark	52	15%	278	79%
Flathead	1021	80%	255	20%
Total Montana	2954	43%	3641	53%

Source: Gorte, CRS, 1989, Table 18.

C. The Sources of Economic Vitality

In order to understand the decreasing importance of extractive economic activity in Montana, we need to look at what have been the sources of economic stability and vitality during the hard times in the extractive sector.

Growth in employment and income in Montana in the 1980s has been concentrated in the following sectors:

- i. Self-employment
- ii. Local services
- iii. Retirement and investment income

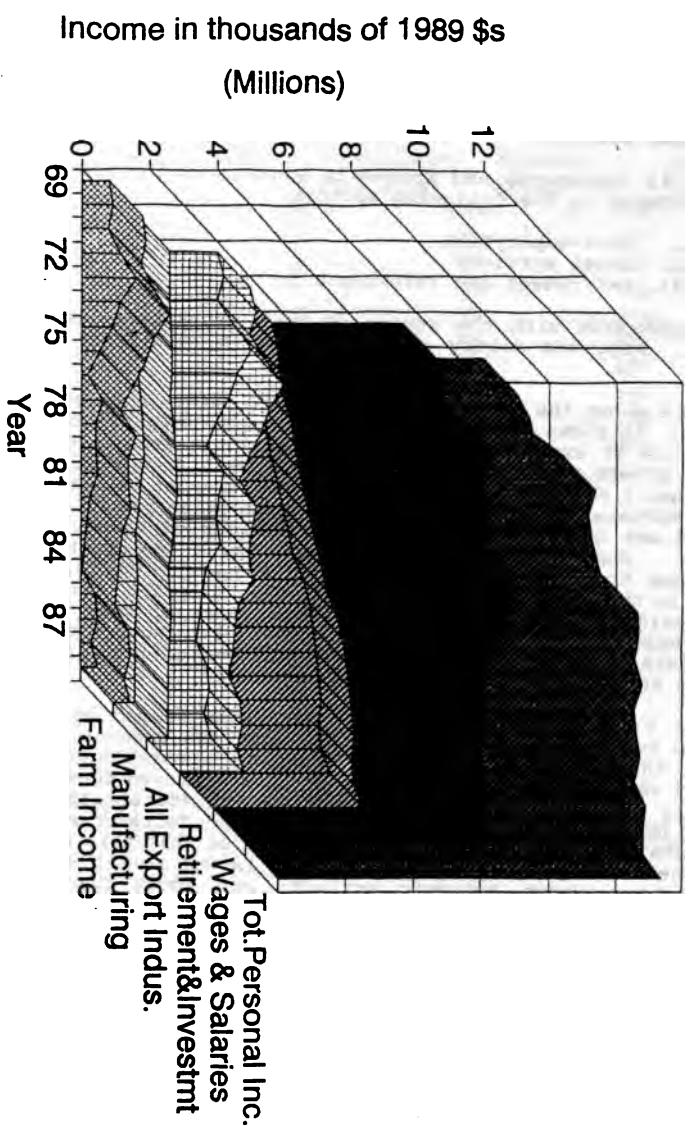
This contrasts with the source of most extractive industry employment: wage and salary employment for a relatively large firm.

Figure 4 shows the composition of Montana income over the last two decades. It shows, as have previous figures, the unstable and declining role of export-oriented industries. It also shows the lack of any growth in wage and salary income in Montana during the 1980s. Figure 5 shows that wage and salary employment was also not growing in Montana during the 1980s. All employment growth during that period was tied to the ultimate in small businesses, self-employment. Some of this reliance upon self-employment was certainly due to Montanans struggling to adjust to declines in employment in the extractive industries. In an effort to remain in Montana, residents created their own jobs. Some of this may be seen as temporary survival efforts. But it underlines the important role of entrepreneurial effort and commitment to place in stabilizing and stimulating the Montana economy.

Figure 1 earlier showed the dominant role played by local services in boosting employment over the last two decades. That compares to the decline in employment in export industries over the same period shown in Figure 4. Montanans have employed themselves increasingly not by scraping at the earth to create something to export but by "taking in each others' wash" and "scratching each others' backs." Popular economic wisdom tells us that this type of "lifting the economy up by its bootstraps" is not possible, that only extractive-export economic activity can boost the local economy. But clearly this is not the case. Local residents creating businesses that provide an increasingly rich mix of local services to other residents help reduce the leakage of income out of the local economy and thereby stimulate and expand the local economy. This is really what economic development is all about: weaving an increasingly complex web of local economic interdependencies that allows an area to not only export but to become increasingly diverse and self-sufficient.

Composition of Montana Income 1969-1989 Constant 1989 Dollars

Figure 4



Another important stimulant to the local economy over the last two decades has been the steadily rising flow of retirement and investment income. Retirement income consists of both social security and related medical payments as well as the return on private retirement-oriented investments and other pension programs*. These income flows are not the result of current economic activities in the local economy. They follow retirees as they make their residential location decisions. Given this "foot-loose" income, those residential location decisions can be made almost independent of what the employment opportunities are in a particular community. In this setting, retirees preferences for the quality of the living environment, both social and natural, can play a very important role. These stable and growing retirement income flows have become a significant part of the economic base of many Montana communities. Protecting the environmental values that attract and hold these income flows can be an important part of economic development efforts.

3. Mitigating the Loss of Timber-Related Jobs

Even though the net employment impact associated with preserving Montana's remaining roadless areas may be positive, reduced timber harvests can still be disruptive to both the wood products industry and its employees. In this section we discuss ways in which the negative impact on the timber industry can be reduced.

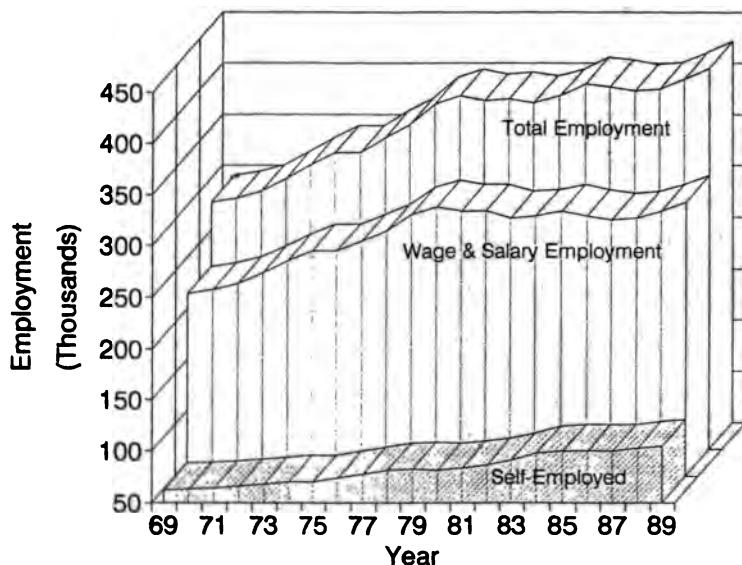
A. Reduction in Federally Subsidized Timber Harvests Will Automatically Stimulate Private Timber Production

Timber from federal lands competes in the market place with timber produced on private forested lands. One impact of the Forest Service's policy of assuring a low cost supply of timber to industry has been to discourage timber production on private lands. As the federal supply is reduced, stumpage prices will rise somewhat and provide greater reward for timber management on private lands. Because of this offsetting market-oriented response, the decline in timber supply will not be as great as the decline in supply from federal lands. Given that much of the supply from federal lands came at a loss to the Forest Service, such a switch in sources of supply towards private lands makes economic sense.

*All investment income, of course, is not retirement income. Much investment income also does not circulate within the local economy and for that reason may have no stimulating effect on the local economy. It simply flows in to investment owners and then flows out as it is reinvested outside the local economy. It is only that investment income that is actually spent within the local economy that has a stimulating effect.

Figure 5

Composition of Employment Montana, 1969-89



B. The Forest Service Can Boost Productivity on Already Roaded Lands

As discussed above, the dollars the Forest Service wishes to invest in managing roadless areas for timber often would be dollars spent on low productivity, high cost sites. Redirecting those dollars, instead, to more productive sites that can be managed at lower cost should allow the timber productivity of these sites to be increased. This would partially offset the lost of the timber potential of the roadless areas.

C. Investments in Restoring Ecosystems Badly Damaged by Timber Harvest Activities

Timber roads and clear cuts have left extensive areas of Montana seriously damaged. Direct rehabilitation activities are necessary to stop erosion, reestablish timber stands, and restore their capacity to support wildlife populations. Dollars that would otherwise be lost on below cost timber sales in roadless areas could instead be redirected towards repairing the past damage caused by timber harvest activities. The areas chosen could be those most critical for wildlife and ecosystem connecting corridors. Since much of this rehabilitation work would call for the same heavy equipment and woods-working skills that supported timber harvests, it has the potential to put to work some of the same people whose jobs may be threatened by reduced timber harvests. The Northern Rockies Ecosystem Protection Act contains provisions that explicitly seek to invest in "wildland recovery" in this way.

D. Reductions in Raw Log Exports

Only a very small amount of the timber harvest in Montana is exported directly for foreign processing. Montana's isolated location protects it against such direct exports. However, the large volume of log exports from the forests between Montana and the west coast creates a supply pressure that distorts log flows throughout the western states. Logs not available west of the Cascades create pressure to import logs from east of the Cascades or leads mills east of the Cascades to have to go further east in pursuit of supply. A displacement effect draws logs towards the west as west coast logs are exported. In that sense, the exportation of logs has a very real impact on Montana and Idaho timber supply. Reducing the export of unprocessed logs would have a similar positive impact on Montana and Idaho timber supplies and associated employment.

E. Increased Recycling of Cardboard and Paper

Lumber mills and paper mills are, to a certain extent, complementary operations. Paper mills can use as a raw material

the waste products of lumber and plywood mills. But the raw material needs of the paper and paper board mills goes beyond the chip and sawdust output of the lumber mills. This puts lumber mills and paper mills in competition for the same roundwood supplies. Recycling cardboard and paper can provide paper mills with an alternative source of fiber which then frees up trees for use at lumber mills. Recycling paper, in effect, expands the timber supply available to lumber mills.

The pulp mill in Missoula as well as the pulp mills throughout the Pacific Northwest already make use of a significant amount of recycled material. But the proportion of recycled material is far below that found in other industrialized nations. The Forest Service has estimated that if the U.S. were to move to paper fiber recycling levels, typical of those found in Germany and Japan today, timber supplies would be significantly extended. The impact of paper recycling on timber supply would be sufficient over time to offset the impact of reduced timber harvests associated with spotted owl protection (Ince and Alig, 1992). That impact would not be immediate since it was assumed that it would take five decades to reach the recycling levels now found in other countries. It is clear, however, that public policies encouraging rapid implementation of paper recycling can significantly expand the raw material base available to our lumber mills and, thus, protect employment at those mills.

F. Increased Value-Added Manufacturing

One reason for the ongoing reduction in employment associated with Montana's timber harvest is the shift towards automated mills producing a more standardized product (studs) with much less labor input. It is clear that market forces have pushed Montana sawmill operators this direction in an attempt to reduce costs and remain competitive nationally and internationally.

What this continues to do is reduce the "labor content" of the wood products exported from Montana. This also puts our firms in direct competition with all other stud mills in the nation. This can lead to considerable instability in employment. The obvious way to fight this trend is to process the wood products made in Montana further. This would both add additional labor content and focus sales towards less standardized markets.

To a certain extent this is already going on at some of Montana's mills. For instance, both of the mills in the Bozeman area, the Plum Creek mill at Belgrade and the Brand-S mill in Livingston have made significant investments in milling equipment that allow them to produce more labor-intensive, higher-valued wood products such as molding, specialized "do-it-yourself" products, countertops, drawer components, and materials for gift boxes of wine. One of Missoula's mills also focuses upon specialized wood

products. The burgeoning log home industry can also be seen as part of this focus on more labor-intensive, specialized wood products.

There is nothing easy about diversifying the wood products industry in this way. It depends primarily upon entrepreneurial skill and determination. Government policy cannot make it happen. But it can happen in a way that allows Montanans to get far more economic benefit from the timber that we harvest. It boosts the economic benefit while reducing the environmental damage. It is precisely in this direction that the wood products industry has to move.

4. Conclusion

Montanans do not face a tragic choice that forces them to choose between preserving their natural wildland heritage and impoverishing themselves. Protecting wildlands and enhancing their economic well-being are not only compatible objectives, but, more importantly, our economic future is tied to protecting the unique qualities of Montana's natural landscape.

The timber-related job loss associated with protecting Montana's remaining roadless areas is quite small because most of those roadless areas are not suitable for timber management and because the wood products industry has been shrinking in relative and absolute importance in Montana for over a decade now. A few weeks worth of normal job growth in Montana's National Forest counties will offset what small impact there is.

Montana's economic future is tied to what makes it unique: its spectacular natural landscape and the wildlife it supports. These world-class recreation, wildlife, and scenic resource will grow increasingly valuable as environmental sensibilities continue to develop and as more and more natural environments are degraded by industrial and urban development. The positive impact the natural landscape has upon the economy can already be seen in many of Montana's "wilderness" counties which have become the sources of vitality for the state's economy.

To open Montana's remaining roadless areas to roaded logging would represent pure economic waste. These areas can only be logged at a loss to the federal government. Logging them will provide a few hundred additional jobs in an industry that has been a declining source of employment and income. In the pursuit of these few jobs, we will permanently sacrifice Montana's real economic base: the natural landscape that attracts and holds Montanans here while supporting them physically and spiritually in a way found in few other places in this nation. There is no compelling economic logic to roaded timber development of Montana's remaining roadless areas.

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(The complete report is held in the committee files.)

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TESTIMONY

OF

DEBBIE SEASE
LEGISLATIVE DIRECTOR
SIERRA CLUB

BEFORE THE COMMITTEES ON

AGRICULTURE

AND

MERCHANT MARINE AND FISHERIES

HEARING ON

THE NORTHERN ROCKIES ECOSYSTEM PROTECTION ACT,
H.R. 2638

MAY 4, 1994

"When we try to pick out anything by itself, we find it hitched to everything else in the universe." *John Muir*
National Headquarters: 730 Polk Street, San Francisco, California 94109 (415) 776-2211

Honorable Chairmen, members of the Committees, thank you for this opportunity to present the views of the Sierra Club on H.R. 2638, the Northern Rockies Ecosystem Protection Act. My name is Debbie Sease and I am the Legislative Director of the Sierra Club. The Sierra Club has 450,000 members including approximately 4000 in the Northern Rockies.

I am pleased to offer the Sierra Club's enthusiastic support for the Northern Rockies Ecosystem Protection Act. This bill represents a scientific and economic based ecosystem approach to land management -- an approach that the Congress must turn to if we are to safeguard America's great natural heritage. We welcome the Committees' interest in this legislation and your willingness to look at new and innovative ways of protecting whole ecosystems.

Since 1892 the Sierra Club has been at the forefront of efforts to establish new national parks, wilderness areas and other protected lands to preserve not only our wilds and wildlife, but the quality of our air, water, and public health. Yet a century of experience has taught us a powerful lesson: Our air, water and land are inextricably linked. Despite all our efforts, the biosphere itself -- the "web of life" on which all of us depend -- is in peril.

It is no longer enough to treat problems in isolation from one another. Our future survival demands a comprehensive, integrated plan to save the global environment. Looking beyond political boundaries is imperative. It is in response to this imperative that Sierra Club launched our "Critical Ecoregions Program".

We have identified 21 critical ecoregions in the United States and Canada. Our goal is to restore these 21 ecoregions to health and beauty. It is not just in the Northern Rockies that we need to enact comprehensive protection strategies, but in the Mississippi Basin, the Atlantic Coast, the Southwest Deserts, the Alaska Rainforest, and the 16 other critical ecoregions as well.

Our current wilderness, national park, and national refuge system is a testament to the vision of conservation leaders and the dedication of past congressional leaders. But it is not enough. Nature does not respect artificial boundaries, and these lands are quickly becoming isolated islands in a sea of development. We must both expand the limits of these "natural islands", and begin to control the environmental impacts of development in the ecosystems surrounding the protected core areas.

WILDERNESS IS THE FOUNDATION FOR ECOSYSTEM PROTECTION

It would be a serious mistake to assume that our recognition that existing wilderness and park protection systems have not met the challenge of ensuring ecosystem viability reflects a diminished respect for the role of wilderness, park, and other inviolate land protection measures, or an abandonment of these programs.

To the contrary, we believe that these systems are the critical building blocks for ecosystem protection, and expanding these systems will remain the Sierra Club's highest priority for protecting ecosystems. Our remaining wild lands and our existing healthy watersheds are the linchpins that are holding our beleaguered ecosystems together. They provide the vital core which we must protect as we work to restore and heal the damage we have wrought on our forests and watersheds.

Wilderness is not an outdated concept, it is a vital component of any effort to achieve healthy functioning ecosystems. Wilderness provides the anchor that must hold the ecosystem together as we focus more on restoring the damaged watersheds, forests and desert lands to healthy conditions.

One of the strengths of NREPA is that while it looks beyond the traditional political boundaries to the interrelated needs of the Northern Rockies ecosystem, it relies on a core of land protected under proven land and water protection systems.

I look forward to working with the Subcommittee on this and other measures to ensure the future of the Northern Rockies and other ecosystems.

Before I detail the reasons for our support of this bill, I want to briefly cover what is at stake in the Northern Rockies.

THE NORTHERN ROCKIES

Outside of Alaska, the Northern Rockies offer the best place to find ecosystems that still have as many large mammals as when Lewis and Clark passed through seven generations ago. The images of the frontier west are more than memories in the Rockies where the last free roaming vestiges of a wilder era persevere in the form of bison, pronghorn antelope, elk, deer, salmon and steelhead. In the lower 48 states, only the Rockies provide sufficient wild habitat for vanishing species like lynx, grizzlies, peregrine falcons, trumpeter swans, black footed ferrets, and wolverines.

Fortunately, the Northern Rockies also have a long history of environmental protection. With the designation of Yellowstone National Park in 1872, America formally recognized the need to preserve our priceless natural treasures for future generations.

This tradition continued with the designation of some of the most extensive and important wilderness areas in the country. The Frank Church River of No Return Wilderness in Idaho is the single largest wilderness in the contiguous United States. The Bob Marshall wilderness complex, designated in three different bills, may be the most biologically complete of all wilderness areas designated in the country. The wilderness surrounding Yellowstone National Park - including the Absaroka-Beartooth, the North Absarokas and the Washakie -- all set important milestones in conservation battles.

While we have a right to be proud of these accomplishments, they are not enough to guarantee the survival of far ranging species such as the grizzly. We need to do much

more to achieve the preservation of the wilderness and ecosystems of the Northern Rockies. The Sierra Club's vision for the Northern Rockies is to restore and maintain biological integrity and diversity with sustainable human activities and communities as an integral part of that ecosystem. NREPA will take a major step toward that end.

NREPA

The Sierra Club supports H.R. 2638, the Northern Rockies Ecosystem Protection Act (NREPA). NREPA is based on biological, rather than political, or agency boundaries, is based on a core of inviolate wilderness areas and protected rivers, and links these areas with biological corridors.

The heart of NREPA is wilderness designation for most of the remaining national forest roadless lands in the Northern Rockies. This is the most important portion of the bill since the permanent, inviolate protection of the roadless lands as components of the National Wilderness Preservation System must be the centerpiece of any ecosystem protection effort in the Northern Rockies.

Many of the large, wide ranging species of the Northern Rockies require core areas for their healthy survival. Grizzly bears, elk, wolverines, and fish such as salmon and bull trout all rely on undisturbed habitat. Fragmentation, however, has eaten away at much of this habitat. Highways, agricultural development, townsites and subdivisions have claimed most of the prime habitat in valleys and bottomlands. Many large tracts of wildlands have been splintered by logging and mining, leaving (at best) much smaller undeveloped blocks.

The loss and isolation of habitat is the number one threat to animal species in the Northern Rockies. For instance, grizzly bears are now limited to less than two percent of their former range. Wolves have been able to recolonize only a fraction of one percent of their former habitat. The remaining undeveloped areas in which these

animals can find the solitude they seek must be protected.

Sierra Club supports the bill's express reservation of a federal reserved water right for the wilderness areas protected in the bill. The Sierra Club has long supported this proven method for protecting water resources in wilderness areas.

NREPA also designates 1300 miles of rivers as components of the National Wild and Scenic River system. The Sierra Club has supported these rivers for wild and scenic designation for many years due to their clean water, wildlife, sparkling beauty and their importance as fisheries.

NREPA contains protective management for biological connecting corridors. The scientific community has determined that maintaining viable corridors to allow wildlife and plant migrations and genetic interchange between core protected areas is also critical to a healthy ecosystem. The core areas are too isolated and too small to assure the perpetuation of native wildlife and native biological diversity on their own. The United States Fish and Wildlife Service has determined, for instance, that linkage zones are important for the free travel of grizzly bears among the major ecosystems of the Northern Rockies. Unfortunately, the USFWS has not provided any protection for these linkage areas. NREPA would help correct this problem.

NREPA starts a pilot system of National Wildland Recovery Areas. This program calls for the rehabilitation of areas that have been abused through excessive logging, road building and mining in the past. These are areas such as that portion of the Targhee National Forest where clearcuts delineate the western boundary of Yellowstone National Park. While these areas are now ailing, they once were thriving with a full range of fish and wildlife. Rehabilitation of these areas will be an important addition to the health of the Northern Rockies ecosystem.

SUGGESTED ADDITIONS TO NREPA

NREPA is a bold and necessary step toward ecosystem protection in the Northern Rockies. No one bill, however, can be expected to include all of the necessary elements to protect the Northern Rockies. While we would not want these suggested additions to delay any forward movement of NREPA, I would like to note some of the most important additions that the Sierra Club would like to see considered.

- National Forest roadless lands in the Medicine Bow and Black Hills National Forests should be designated wilderness.
- Additional lands in the Bighorn, Bridger-Teton, Shoshone, Targhee, and Beaverhead National Forests, among others, should be designated wilderness.
- Bureau of Land Management roadless lands such as the Red Desert and those contiguous to proposed Forest Service wilderness areas should be designated wilderness.
- Management of corridors should be defined to set standards and to include a compatibility opinion on proposed new activities within the corridors. A moratorium should be placed on development within the corridors until standards are set.
- Watershed recovery areas should be added.
- An Ancient Forest Reserve system should be included for old growth that falls outside of wilderness.
- Specific hardrock and leasing withdrawals for areas such as the New World mining district northeast of Yellowstone National Park should be added.

This list is not meant to be exhaustive but rather illustrative of the subjects we would

like the Committees to consider as you debate this legislation.

OTHER PENDING WILDERNESS BILLS IN THE NORTHERN ROCKIES

There are two other pending wilderness bills that affect this region, and although they are not the subject of this hearing, it is worth noting how they relate to NREPA. Both H.R. 2473, the Montana Wilderness bill and H.R. 3732 the Idaho wilderness bill would designate portions of the roadless lands covered by NREPA, and as such might be viewed as viable incremental steps toward the more comprehensive protection goals of NREPA. Unfortunately, while this is true of the Montana bill, the same cannot be said of the Idaho bill.

The Sierra Club cannot support H.R. 3732, the Idaho Wilderness bill. The Idaho wilderness bill, in addition to leaving out many deserving areas, contains numerous serious flaws, including:

- 1) highly objectionable release language, which would hinder our ability to protect roadless areas not designated in the bill as well as preclude the Forest Service from conducting a wilderness review during the next round of forest plans;
- 2) water rights language that utterly fails to protect the water resources of the wilderness areas, and not only denies a water right to wilderness areas designated in H.R. 3732 but also disavows a water right established by past wilderness legislation;
- 3) sanctioning logging in several inappropriate areas. Until these flaws are fixed we will continue to oppose H.R. 3732.

On the other hand, Sierra Club has given its qualified support to the Montana Wilderness bill, H.R. 2473 as it has been amended and reported out of the Natural Resources Committee. This bill would provide protection to more than two million

acres of national forest roadless lands in Montana that are currently unprotected, including 1.7 million acres of wilderness and 400,000 acres of wilderness study areas. The bill does contain a version of release language, which we strongly believe is unnecessary and should be deleted on the floor. In contrast to the Idaho release language, however, it will not impair our ability to protect the natural values of the undesignated lands in Montana. None-the-less, it is time for the issue of release to be taken off of the table. The issues of timber supply will not be solved through release language and Congress should not hold out the hope to the timber industry that it will be.

While passage of the Montana bill would provide incremental progress by protecting critically important areas, alone, it will not assure the viability of this ecosystem. Many other national forest roadless lands in Montana will continue to be subject to Forest Service developments. While we give this bill our qualified support because it does protect a portion of what needs to be protected, this bill also makes the point for the need for additional Congressional action. The Montana wilderness bill will not protect the entire roadless area resource of Montana much less the rest of the Northern Rockies. Even if H.R. 2473 becomes law, it will be necessary to follow this bill with additional legislation such as NREPA.

EASTSIDE ECOSYSTEM MANAGEMENT

We are encouraged by the Administration's initiative to do a comprehensive scientific assessment of the Columbia river watershed and conduct an ecosystem based EIS process as part of the Eastside Ecosystem Management Process. This is an important new approach that can complement the additional wilderness designations proposed in NREPA.

The EIS process for eastern Washington and Oregon is beginning, even though there are some difficulties getting the public adequately involved in the scientific process. We

hope these problems can be resolved and that this process will be an important contribution to reforming past agency mismanagement and providing new direction for protecting and restoring these ecosystems.

However, we have also heard disturbing news that consideration is being given to limiting the EIS process in Idaho to merely evaluating the recent adoption of the interim PACFISH guidelines. This would be a terrible mistake and undermine the promise and potential of providing an ecosystem analysis and approach to protection and management of this vital part of the Northern Rockies Ecosystem.

CONCLUSION

In closing I would again like to thank the Committees for holding this important hearing, and to reiterate the Sierra Club's strong support for the Northern Rockies Ecosystem Protection Act. The Northern Rockies Ecosystem Protection Act can be a model for wildland preservation and restoration, and on behalf of the Sierra Club, I urge the Committees to give it the serious and prompt consideration it deserves.

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